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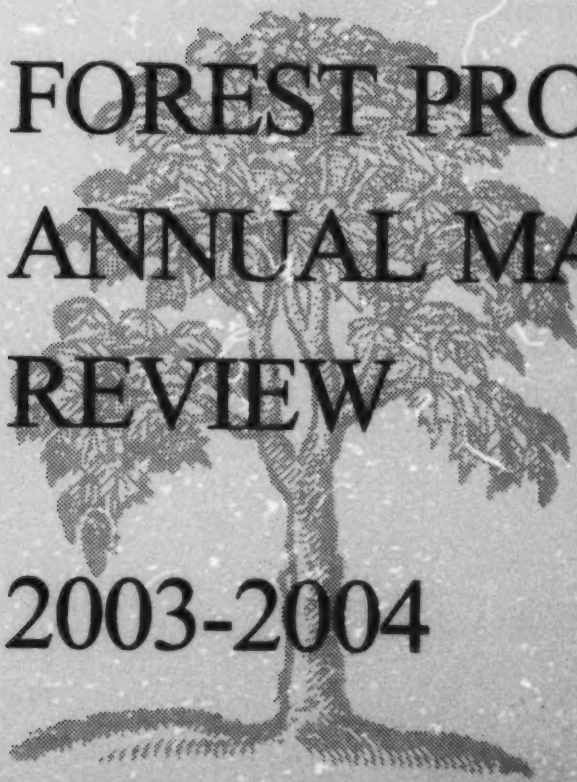

FOREST PRODUCTS ANNUAL MARKET REVIEW

2003-2004

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NOTE

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ABSTRACT

The UNECE/FAO *Forest Products Annual Market Review, 2003-2004* provides general and statistical information on forest products markets and related policies in the UN Economic Commission for Europe region (Europe, North America and the Commonwealth of Independent States). The *Annual Market Review* begins with an overview chapter, followed by a description of government policies affecting forest products markets. After a description of the economic situation and construction-related demand in the region, five chapters based on annual country-supplied statistics, describe: wood raw materials, sawn softwood, sawn hardwood, wood-based panels, and paper and paperboard. Additional chapters discuss markets for certified forest products, value-added wood products and tropical timber. In each chapter, production, trade and consumption are analysed and relevant material on specific markets is included. Tables and graphs provided throughout the text present summary information. Supplementary statistical tables may be found on the Market Information Service website within the UNECE Timber Committee and FAO European Forestry Commission website.

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PREFACE

Sustainable forest management has three components: environmental, social and economic. The economic component is closely dependent on forest products markets that must be economically viable if the sector is to be truly sustainable for the long term. Accurate, independent, reliable and timely information on, and analysis of, international trends, are vital for governments and other stakeholders in this sector to make their operational decisions and to formulate their policies. From their beginnings in the late 1940s, the UNECE Timber Committee and the FAO European Forestry Commission have placed high priority on monitoring and analysing forest products markets on the basis of statistics supplied by each member country.

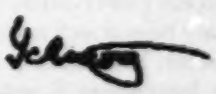
The *Forest Products Annual Market Review* is the annual flagship publication of the UNECE/FAO integrated programme in the field of timber and forests, serving the Timber Committee and the European Forestry Commission. It analyses forest products market developments in the context of the surrounding political and economic environment within the UNECE region. It provides readers with the earliest comprehensive analysis on recent developments in the forest and forest product sector in the UNECE region and among its trading partners. This publication should be of use to experts and market actors as well as those responsible for policy formulation in the forest and forest industries sector.

Commensurate with both organizations' priorities, UNECE and FAO are working to make the analyses they produce more relevant to policy makers and attempting to ensure that they are a stimulus and support to meaningful policy discussion in international fora. Current policy issues, many of a cross-sectoral nature, discussed in the chapter on "Policy issues related to forest products markets in 2003 and 2004" include:

- Forest law enforcement, governance and trade;
- Forest certification;
- Policies promoting the sound use of wood;
- Research and development related policies;
- Industry competitiveness and investment policy;
- Climate change policy;
- Wood energy promotion policy;
- Trade policy and tariff and non-tariff barriers;
- Phytosanitary measures; and,
- Russia – developing a new forest code.

This ability of UNECE and its partners to produce independent and policy-relevant analysis in the areas identified as priorities by member states and considered vital for the sustainable development of all countries in the region, demonstrates once again its continuing central position for international cooperation in the region. This year the policy analysis spans the entire forest and forest industries sector in preparation for the joint session of the Timber Committee, with its market orientation, and the European Forestry Commission, with its forest orientation. The annual Timber Committee Market Discussions on 5 October 2004 have the theme of "links between forest policy and market policy", and this publication provides background for this forum.

This *Review* is the result of contributions by more than 40 experts and authors and their organizations, including sector experts, national correspondents, colleagues in partner organizations and members of the secretariats in Geneva and Rome. I offer my appreciation to all those who have contributed, directly or indirectly, to preparing this *Forest Products Annual Market Review*.



Brigita Schmögnerová
Executive Secretary
UN Economic Commission for Europe

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In addition to those named below, numerous other experts helped on specific parts of the *Review* and their names are included in the following list of contributors. The analysis is based on statistics received from official country correspondents, who are also listed. For some data in the chapter on certified forest products, the UNECE Timber Committee and FAO European Forestry Commission established a network of officially nominated country correspondents on certified forest products markets and certification of sustainable forest management. Our sincere appreciation goes to these people without whose efforts we would not have been able to produce the *Review*.

In order of chapter number, we first acknowledge the external authors, then all those who helped from the secretariat.

The policy chapter was written by Jim Bowyer, Professor, Department of Bio-based Products, University of Minnesota, USA, and Ewald Rametsteiner, also a forest-sector policy expert, Institute of Forest, Environment and Natural Resources Policy, University of Natural Resources and Applied Life Sciences, Vienna, Austria. It was a pleasure to work together with them to analyse the current policies affecting today's forest products markets. Dr. Rametsteiner is also a member of the UNECE&FAO Team of Specialists on Forest Products Markets and Marketing.

Our thanks also to Dieter Hesse, Chief, Macroeconomics and Structural Studies Section, UNECE Economics Analysis Division, who reviewed the economic overview chapter. The construction section of the economic background chapter was written by Al Schuler, Research Economist, Northeast Forest Experiment Station, USDA Forest Service, Princeton, West Virginia and Craig Adair, Director, Market Research, APA-The Engineered Wood Association, Tacoma, Washington. Dr. Schuler also is a member of the UNECE&FAO Team of Specialists on Forest Products Markets and Marketing. They again wrote the section on engineered wood products markets in the value-added wood products chapter. The first part of the value-added products chapter was written by Jukka Tissari, Director, Division of Forest Industries and Markets, Indufor Oy, Helsinki, Finland. We complement the analysis of primary-processed products with indications of demand from secondary-processed products through the valuable work of these authors.

Håkan Ekström, President, Wood Resources International, wrote the wood raw materials chapter analysis. He is Editor-in-Chief of *Wood Resource Quarterly* and the *North American Wood Fiber Review*, two publications tracking worldwide wood fibre markets, including prices. He, in turn, worked with collaborators, who are also included in the contributors list. We thank all of them.

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For the paper, paperboard and woodpulp chapter, four authors, representing the different subregions of the UNECE, contributed. First we thank Peter J. Ince, Research Forester, USDA Forest Service, US Forest Products Laboratory, who coordinated the production of the chapter. Dr. Ince was also a principal author for the North American subregional analysis. Subregional analyses came from Professor Eduard L. Akim, PhD, Saint Petersburg State Technological

University of Plant Polymers and the All-Russian Research Institute of Pulp and Paper Industry, Bernard Lombard, Recycling and Economics Manager, Confederation of European Paper Industries (CEPI) with statistical assistance by Eric Kilby, Statistics Manager, CEPI, and by Tomas Parik, Managing Director, Wood and Paper A.S. Both Dr. Ince and Mr. Spelter, sawnwood chapter author, work together in a research unit led by Ken Skog, Timber Demand and Technology Assessment Research Work Unit, Forest Products Laboratory, USDA Forest Service, whom we would also like to thank for enabling this continued cooperation. Both Dr. Ince and Professor Akim are members of the UNECE&FAO Team of Specialists on Forest Products Markets and Marketing.

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Matt Fonseca (UNECE/FAO Timber Branch) was responsible for the publication layout. Cynthia de Castro, (UNECE/FAO Timber Branch) performed all administrative duties. Sefora Kifle (UNECE/FAO Timber Branch) prepared price data and supported authors with documents and journals. T. P. Cherman, Consultant, was the principal copy editor. Christina O'Shaughnessy (Editor, Trade Development and Timber Division) and Douglas Clark (UNECE/FAO Timber Branch) also did some copyediting as well as proofreading of most of the publication. Thanks to all of them, and we welcome Mr. Clark to the Timber Branch and *Review* Team.

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[1] *Forest Products Statistics* is available at www.unece.org/trade/timber/mis/fp-stats.htm

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DATA SOURCES

The data on which the *Forest Products Annual Market Review* is based are collected from official national correspondents[2] through the FAO/ECE/Eurostat/ITTO Joint Forest Sector Questionnaire, distributed in April 2004. Within the 55-country UNECE region, data for the 19 EU and EFTA countries are collected and validated by Eurostat, and for other UNECE countries by UNECE/FAO Geneva.

The statistics for this *Review* are from the TIMBER database system. As the database is continually being updated, any one publication's analysis is only a snapshot of the database at that particular time. The database and questionnaires are in a state of permanent development. Data quality differs between countries, products and years. Improvement of data quality is a continuing task of the secretariat, paying special attention to the CIS and central and eastern European countries. With our partner organizations and national correspondents, we strongly believe that the quality of the international statistical base for analysis of the forest products sector is steadily improving. Our goal is to have a single, complete, current database, validated by national correspondents, with the same figures available from FAO in Rome, Eurostat in Luxembourg, ITTO in Yokohama and UNECE/FAO in Geneva. We are convinced that the data set used in the *Review* is the best available anywhere as of July 2004. The data appearing in this publication form only a small part of the total data available. *Forest Products Statistics* will include all of the data available for the years 1999-2003. The TIMBER database is available on the Market Information Service of the joint Timber Committee and European Forestry Commission website at www.unece.org/trade/timber/mis.htm.

The secretariat is grateful that correspondents provided actual statistics for 2003 and, in the absence of formal statistics, their best estimates. Therefore all statistics for 2003 are provisional and subject to confirmation next year. The responsibility for national data lies with the national correspondents. The official data supplied by the correspondents account for the great majority of records. In some cases, where no data were supplied, or when data were confidential, the secretariat has estimated figures to keep region and product aggregations comparable and to maintain comparability over time. Estimations are flagged within this publication, but only for products at the lowest level of aggregation.

In addition to the official statistics received by questionnaire, trade association and government statistics are used to complete the analysis for 2003 and early 2004. Supplementary information came from experts, including national statistical correspondents, trade journals and internet sites. Most of these sources are cited where they occur in the text, at the end of the chapters, on the list of contributors and in the annex reference list.

[2] Correspondents are listed with their complete contact details in "Forest Products Statistics, 1999-2003".

EXPLANATORY NOTES

"Apparent consumption" is calculated by adding a country's production to imports and subtracting exports. Apparent consumption volumes are not adjusted for levels of stocks because all countries cannot report stocks.

"Net trade" is the balance of exports and imports and is positive for net exports, i.e. when exports exceed imports, and is negative for net imports, i.e. when imports exceed exports. Trade data for fifteen European Union countries include intra-EU trade, which is often estimated by the countries. Export data usually include re-exports. Regional trade aggregates in tables include trade occurring between countries of the region.

The term "central and eastern European countries", used exclusively for presentational convenience, includes Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Serbia and Montenegro, Slovakia, Slovenia, and The former Yugoslav Republic of Macedonia.

As in last year's *Forest Products Annual Market Analysis*, Europe has been split into "EU/EFTA" (19 countries) and "Other Europe" (22 countries). For a breakdown of the regions please see the map in the annex. References to EU refer to the 15 countries in the EU in 2003 and not the 25 countries in 2004, unless specified.

The term "softwood" is used synonymously with "coniferous". "Hardwood" is used synonymously with "non-coniferous" or "broadleaved". More definitions appear in the electronic annex.

SYMBOLS AND ABBREVIATIONS USED

(Abbreviations spelled out in the text may not be listed again here.)

-	nil or negligible
...	not available
$	United States dollar unless otherwise specified
CEECs	Central and eastern European countries (listed above in explanatory notes)
CIS	Commonwealth of Independent States
CoC	chain-of-custody
EFTA	European Free Trade Association
EQ	equivalent of wood in the rough
EU	European Union (15 countries)
EWPs	engineered wood products
FOB	free on board
GDP	gross domestic product
IMF	International Monetary Fund
m^2	square metre
m^3	cubic metre (solid volume of roundwood or processed product)
m.t.	metric ton
NGO	non governmental organization
PoC	Taiwan Province of China
PPP	purchasing power parities
RWE	roundwood equivalent
SAR	Hong Kong Special Administrative Region of China
UK	United Kingdom
UNECE	Economic Commission for Europe
US	United States
USDA	United States Department of Agriculture
WWF	World Wide Fund for Nature
VAWPs	Value-added wood products

Chapter 1
Forest products markets climb to new records in the UNECE region: Overview of markets and policies, 2003-2004

Highlights

- Forest products markets rose to new records overall in the UNECE region as evidenced by the second consecutive year of rising consumption; however, this development was not universal among all subregions, nor among all products.
- Approaching two million housing starts in 2003, the United States was the engine for demand of forest products, both primary and secondary, in the UNECE region, while outside the region Chinese and Japanese imports soared for temperate and tropical wood.
- China's exports of value-added wood products, especially furniture, have increasingly impacted markets in the UNECE region, and in mid-2004, the US imposed anti-dumping duties.
- Concern for the origins of wood products imported into the UNECE region, and increasing awareness of illegal logging, led government agencies, industry associations and international organizations to initiate measures to curb the trade in such products.
- Certified forest products markets are being driven, in part, by government purchasing policies that ensure sustainable forest management and legality of the source of their purchases.
- Wood energy promotion policies and record high oil prices resulted in heightened consumption of wood for energy; however, the pulp and panel sectors are concerned about raw material costs.
- Sawn softwood demand rose strongly in western Europe and Japan in 2003 and European exporters profited, while in the US, imports continued to rise, despite a weak dollar, benefiting traditional Canadian exporters as well as European and other offshore sources.
- Despite rhetoric to reduce tariff and non-tariff barriers, the ongoing sawnwood trade dispute between Canada and the US continues and the EU has imposed some punitive tariffs that have affected wood and paper products markets.
- The sawn hardwood sector strengthened with rising demand and prices in the US and Europe, fuelled by increased housing starts in Europe and North America.
- Panel markets benefited from rising demand, achieving consumption records and higher prices; however, the competition is fierce in this global market for commodity products.
- Paper consumption climbed strongly in central and eastern Europe and in Russia; however, western Europe demand remained steady, and North American demand continued to erode.

1.1 Forest products market developments, 2003 to 2004

1.1.1 *Regional and subregional developments*

Global economic recovery began in the second half of 2003 as United States and Asian economies provided stimulus for growth, while western Europe lagged behind. Strong growth in the 10 acceding countries contrasted with the disappointing performance of the EU15.

Extremely low mortgage rates in the US stimulated the best housing market in history in 2003, but a small rate rise in June 2004 by the Federal Reserve resulted in a revision downwards of housing starts forecasts for 2004 and 2005. In June 2004, before the rate increase, US mortgage rates had dropped, but housing starts fell unexpectedly, due to a number of economic factors, including retail sales and industrial outlook.

Construction was weak in 2003 in western Europe overall; however, there were some stronger markets, such as the UK. Construction, primarily non-wood, in the CEECs, was growing twice as fast as in western Europe, but on lower volumes.

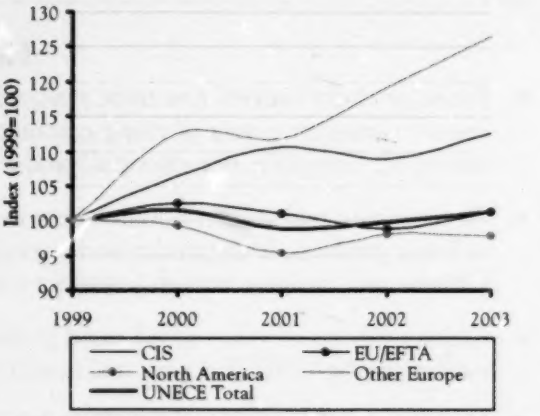
Overall forest products markets were stronger in 2003 than in 2002 in the UNECE region (Commonwealth of Independent States (CIS), Europe and North America), as evidenced by the second consecutive year of rising consumption (graph 1.1.1 and table 1.1.1). However, this development was not universal within all of the subregions, nor among all products analysed in this *Forest Products Annual Market Review, 2003-2004* (hereafter called the *Review*). In North America, the largest consuming subregion, demand fell slightly for primary forest products (sawnwood, panels and paper and paperboard), despite the extremely strong housing market.

Exports of forest products in the UNECE region soared by 16% in overall value in 2003, overcoming a stagnant export situation in 2002. Manufacturers in EU/EFTA countries shipped the largest share by value, but had the smallest percentage increase, 5%, among the four subregions.[3] The largest increases in exports of primary forest products occurred in the CIS, with an almost 50% rise in 2003, and in the central and eastern European countries (CEECs), with a 27% rise.

Shipping costs have risen dramatically in the last year, notably because of rising oil prices. In mid-2004, oil prices were at record levels as refinery capacity use was close to maximum, coupled with the traditional heightened summertime demand and uncertainties of major oil-producing countries, such as Iraq and Russia. Economic improvements, especially in Asia and the US, have created a shortage of shipping space in containers, on railcars and on vessels. As an example of the result of these rises, freight rates for tropical hardwood timber imports from Asia to Europe increased by 80% during the first half of 2004 (TTJ, 2004).

GRAPH 1.1.1

Apparent consumption of forest products by UNECE subregion, 1999-2003



Note: Forest products include sawnwood, panels, paper and paperboard.

Source: UNECE/FAO TIMBER database, 2004.

1.1.2 *EU/EFTA subregion*

In the second largest consuming subregion, EU/EFTA,[4] consumption of all forest products together rose by 2.5%, but remained well under the record in 2000, which was due to the December 1999 windstorms which felled 140 million m^3 in 2 days, equivalent to a year's harvest, collectively, in the most affected countries. Consumption of panels and sawnwood rose much faster than that of paper and paperboard.

[3] The four subregions analysed throughout this *Review* are: CIS, EU/EFTA, Other Europe and North America. Countries within the subregions are listed in the annex with a map of the UNECE region.

[4] This 2003-2004 analysis is based on the most current 2003 statistics available. Unless otherwise noted, all mention of the EU refers to the 15 EU countries: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden and the United Kingdom. The 10 new members are: Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia.

TABLE 1.1.1

Apparent consumption of sawnwood,[1] wood-based panels[2] and paper and paperboard in the UNECE region, 1999-2003

	Thousand	1999	2000	2001	2002	2003	Change 2002 to 2003 Volume	%
EU/EFTA								
Sawnwood	m^3	88 698	92 234	88 704	86 199	90 948	4 748	5.5
Wood-based panels	m^3	42 648	44 543	43 979	41 466	43 355	1 889	4.6
Paper and paperboard	m.t.	78 290	79 418	79 008	78 318	78 601	282	0.4
Total	m^3 EQ [3]	475 558	488 069	480 129	469 763	481 340	11 576	2.5
Other Europe								
Sawnwood	m^3	17 091	19 145	18 497	20 176	20 833	657	3.3
Wood-based panels	m^3	9 165	11 016	10 601	12 009	13 617	1 609	13.4
Paper and paperboard	m.t.	9 046	9 891	10 241	10 357	10 888	530	5.1
Total	m^3 EQ	72 676	81 786	81 273	86 607	92 030	5 423	6.3
Russian Federation								
Sawnwood	m^3	12 683	12 257	11 915	10 236	9 150	-1 086	-10.6
Wood-based panels	m^3	3 060	3 693	4 199	4 654	5 480	826	17.8
Paper and paperboard	m.t.	2 848	3 415	3 773	4 158	4 661	503	12.1
Total	m^3 EQ	34 843	37 095	38 572	37 919	39 209	1 289	3.4
North America								
Sawnwood	m^3	137 112	136 083	135 484	144 148	143 666	-482	-0.3
Wood-based panels	m^3	60 782	61 947	57 193	60 407	61 260	853	1.4
Paper and paperboard	m.t.	104 134	102 510	97 542	97 393	96 669	-724	-0.7
Total	m^3 EQ	669 643	664 358	638 950	657 449	655 589	-1 860	-0.3
UNECE region [4]								
Sawnwood	m^3	255 583	259 718	254 599	260 760	264 597	3 837	1.5
Wood-based panels	m^3	115 654	121 198	115 971	118 535	123 712	5 176	4.4
Paper and paperboard	m.t.	194 318	195 234	190 564	190 226	190 818	592	0.3
Total	m^3 EQ	1 252 719	1 271 308	1 238 924	1 251 739	1 268 167	16 428	1.3

Notes: [1] Excluding sleepers. [2] Excluding veneer sheets. [3] Equivalent of wood in the rough: 1 m^3 of sawnwood and wood-based panels = 1.6 m^3; 1 m.t. paper = 3.39 m^3. [4] Excluding non-Russian Federation CIS.

Source: UNECE/FAO TIMBER database, 2004.

1.1.3 *Other Europe subregion*

"Other Europe", i.e. primarily the central and eastern European countries (CEECs), continued to have higher increases in rates of consumption than western UNECE subregions. Many of these countries have exceeded pre-transition levels of consumption. Considerable volumes of sawnwood and panels that are registered as "apparent consumption" in this subregion are actually further processed into millwork and furniture, and exported.

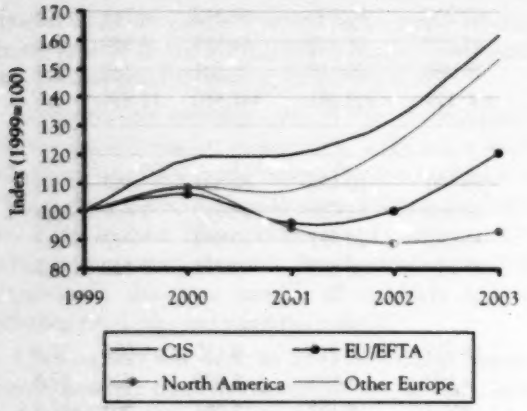
1.1.4 *CIS subregion*

Consumption in the CIS subregion, as measured mainly by the largest consumer and producer, the Russian Federation, rose overall by 3.4%, overcoming the drop in 2002. However, the largest product category, sawnwood, is recorded as continuing its five-year decline in consumption, slipping over 10% in 2004 (although data quality questions may arise here). Thus, the entire 5% increase in the production of sawnwood was exported, as sawnwood exports rose over 18% in 2003. CIS exports are rising faster than those of the other subregions (graph 1.1.2). In value terms, the total primary products exports rose by 49% in 2003 in the CIS. The greatest increases were in sawn softwood exports from the CIS, principally Russia, to destinations outside the UNECE region,

especially Asian countries such as Japan and China, and to Middle Eastern countries such as Egypt.

GRAPH 1.1.2

Exports of primary-processed wood products by UNECE subregion, 1999-2003



Note: Primary-processed wood products include sawnwood, panels, paper and paperboard, woodpulp and roundwood.
Source: UNECE/FAO TIMBER database, 2004.

The continued fall in Russian sawnwood consumption has been more than offset by the 18% rise in consumption of panels. Consumption of paper and paperboard remains at the lower end of the UNECE scale, at 200 kilograms per person in 2003, with only some other CIS countries at a lower rate.[5] Nevertheless, Russian paper and paperboard consumption has been rising steadily over the last years, but remains below its 1992 high of 5.5 million metric tons (m.t.).

1.1.5 *North American subregion*

Demand for panels, primarily structural, climbed 4.4% to record levels, and prices also rocketed, but have since receded. The development was not the same for the two countries, with Canadian panel and sawnwood demand falling in 2003.

Sawnwood consumption remained high, as a significant drop in Canada's consumption was balanced by increases in US sawn softwood and hardwood consumption. As with panels, sawnwood prices, both for softwoods and hardwood, increased towards record levels. Sawn hardwood markets strengthened despite fears of reduced demand by the important furniture manufacturing market to Asian producers. Original aspirations to compensate for potential downturns in domestic consumption by exports to Asian manufacturers for re-import to the US have not materialized. In fact, North American consumption of sawn hardwoods increased in 2003.

North American paper and paperboard producers continue to face a difficult domestic market situation as demand remains below previous levels in the late 1990s. Weak economies were not aided by a softer dollar, and in the US packaging materials such as paperboard continued to slump for the fifth consecutive year.

1.2 Developments by product market sector

1.2.1 *Wood raw materials*

Benefiting from heightened production of primary processors, roundwood removals came close to the record levels of 2000 (caused by the European windthrow, as mentioned above). Higher removals occurred both in western and eastern Europe and the CIS, where nearly a third of total recorded harvests are exported as roundwood.

Higher sawmill production in the CEECs generated more chip residues, and their exports have doubled in the last few years. Chips are used traditionally for both panel and pulp manufacturing, and increasingly in energy generation.

In general, sawlog prices fell across the UNECE region, but rose where supply was a concern, for example in the Baltic countries and Poland.

Roundwood markets are the first stop for any illegally harvested logs. Governments and trade associations have developed initiatives to stem the flow of illegal logs while the topic becomes increasingly political.

1.2.2 *Sawn softwood*

Globalization has impacted the production, consumption and trade of sawn softwood, as myriad international players exert fierce competitive pressures. Similar to other sectors, global currency rates shaped the import and export patterns of sawn softwood products.

The US housing market drove domestic production and record import levels as well. Imports from Canada increased despite ongoing anti-dumping tariffs and duties. Imports from "offshore" (i.e. outside North America) also climbed, overlooking the weaker dollar as the high demand sparked record sawnwood prices.

Asian markets were strong in 2003 and early 2004, for example in China and Japan. All UNECE region countries are aware of these market opportunities, and record levels of sawnwood are flowing eastward from Europe and the CIS to Asia.

[5] Apparent consumption tables by country, including per capita consumption, may be found in the electronic annex at: www.unece.org/trade/timber/docs/fpamr/2004/fpamr2004.htm.

While sawn softwood consumption increased in the CEECs, consumption is recorded as continuing to fall in Russia in 2003, and is forecast to fall further in 2004. Both production and exports are increasing, in part based upon foreign investment and liberalized government policies.

1.2.3 *Sawn hardwood*

Sawn hardwood consumption rebounded in 2003 in the UNECE region as housing starts stimulated demand for hardwood trim and furniture. Hardwood flooring, both solid and laminated, has been one of the primary drivers for the sector. With a rise in demand, North American prices rose in 2003 and early 2004; however, European prices fell during the same period.

The CEECs' hardwood consumption, production and trade are increasing more rapidly than other regions. Accession to the EU should facilitate further growth, but many hardwood trade links had already been established beforehand.

1.2.4 *Panels*

Panel markets in the UNECE region fared better than other primary sectors, as measured by the largest increases in consumption coupled with higher prices. Trade and production rose in every subregion, although it rose less in western Europe. The main reason for the robust growth was an increase in demand. However, industry restructuring in both Europe and North America is finally paying off.

Trends are opposite in structural versus non-structural board in North America and Europe. In North America panel consumption and production increased for wood-based housing, which was riding high in 2003 and early 2004. In contrast, the principal non-structural panels, such as MDF and particle board, suffered market downturns. Restructuring is occurring and has already had positive effects, with prices rocketing in 2004.

The European market for structural boards is much weaker, as the wood-frame housing market is still a fledgling industry in Europe. Nevertheless, OSB production is growing at a faster rate in Europe than in North America, and excess production was exported to the US, taking advantage of high prices. The main panels in Europe are particle board, accounting for roughly two thirds of total panel production, and MDF, accounting for another 20%. Both particle board and MDF had stronger markets and prices in later 2003 and early 2004.

1.2.5 *Paper, paperboard and woodpulp*

Commensurate with improvements in world economies, market pulp demand increased in 2003, and with low inventories stemming from weak market demand in 2001 and 2002, prices began to rise. From $450 per m.t. in early 2003, the benchmark price shot up to $570 a year later. However, the dollar weakened in comparison to the euro, and European producers did not achieve the full benefits of the price rise (*Paper and Wood Yearbook 2004*, Finnish Forest Industries Federation).

Paper and paperboard saw divergent trends in the UNECE subregions in 2003, with decreased demand and production in North America, contrasted to an increase in European production, which rose by 2%.

Paper and paperboard consumption increased in both the CEECs and in the CIS, as evidenced by Russian statistics. However, imports also rose, and in Russia the imports of higher grades of paper, with their equally higher costs, resulted in a widening trade deficit in value terms. Exporters of higher paper grades outside the subregion are evidently finding profitable markets in these countries, rather than battling over market share in commodity paper grades such as newsprint.

1.2.6 *Certified forest products*

The majority, i.e. 90%, of the world's certified forest resources are in the UNECE region. Despite the jump in area of forestland certified in Canada in 2003, the prior rapid gains in Europe and in other areas of the world slowed in 2003. One focus of certification schemes has been to provide traceability or proof of origin through chain-of-custody certificates. The dynamic 50% increase in the number of such certificates facilitates assurance of origin.

Potential supply of certified forest products from these forests continues to outstrip demand. General consumer sentiment about deforestation and forest degradation continues to be alarmingly incorrect, especially within the UNECE region, where the public is generally of the opinion that fellings far exceed forest growth, although the opposite is true.

One of certification's greatest assets should be in communicating to final consumers about the positive balance of forests in the UNECE region. However, until certification schemes, and the companies displaying their labels, target public relations campaigns to consumers to achieve this necessary communications link, one of the greatest benefits of certification will continue to be lacking.

Noting the missing link to consumers, and wanting to ensure sustainable forest management, coupled with concern for the origin of wood products, Governments in the UNECE region are modifying procurement policies to

take specific account of the origin of wood products. Ten years ago, when certification was in its infancy, Governments supported the establishment of national and international schemes. There is now a general consensus that certification should be "voluntary and market based", but increasingly Governments are using a demand-pull approach to supporting certification through specification of certified forest products in their purchasing.

There were significant developments in the schemes themselves in 2003, with Pan European Forest Certification becoming global and establishing mutual recognition with non-European schemes under its new name, Programme for the Endorsement of Forest Certification Schemes (still PEFC). No mutual recognition is foreseen in the medium term between PEFC and the Forestry Stewardship Council (FSC).

1.2.7 *Value-added wood products*

Trade of value-added wood products also rebounded in 2002 with 10% growth, a development that continued into 2003. The wooden furniture trade continues to be the most dynamic sector, with China's export values approaching those of Italy, the world leader. China's impressive manufacturing and exporting developments are causing a structural change in the value-added markets, which will only be confirmed in the upcoming years if the trend continues. The US retaliated in June 2004 by imposing anti-dumping duties on some Chinese furniture imports.

One of the brightest wood products sectors is engineered wood products (EWP) where fibres, flakes, veneers and sawnwood are bonded together in various configurations to make products that are stronger, more consistent and more reliable from an engineering standpoint than conventional sawnwood. Currently market growth is tied to North American residential construction, with EWP substitution for solid wood and steel and concrete beams. However, new markets are being developed in Japan, and future market opportunities will depend on development of new applications.

1.2.8 *Tropical timber*

The tropical timber market is increasingly driven by China's imports of sawlogs and veneer logs, plus sawnwood and plywood. China is quickly developing processing capacity, and imports of raw materials are increasing in lieu of sawnwood and plywood.

Tropical timber achieved some price increases for logs and plywood in 2003. European tropical sawnwood imports increased by 17% in value, but only 4% in volume. Tropical timber producers share concerns about proof of legality, and in July 2004 at the International Tropical Timber Council Market Discussions, a representative of the private tropical timber trade expressed the general commitment of the trade to deal in legal merchandise and called for increased legislation to control illegal logging and provide assurance of the legality of the source of traded tropical timber (Earth Negotiations Bulletin 2004).

Sanctions imposed in 2003 by the UN Security Council against Liberian timber exports were maintained in June 2004. The Security Council's decision was based upon the opinion that peace in Liberia is too fragile, and efforts are still necessary to preclude illegal logging and smuggling, and that the Forest Development Authority does not function outside of the capital, Monrovia. Meanwhile, 14 years of civil war has left the economy devastated, as evidenced by an 85% unemployment rate. Forest resources should be one means to eventually make economic improvements.

1.3 Special market topics

1.3.1 *Influence of developments in China*

China's economy is expanding rapidly. The effects on forest products markets are dramatic. China is the largest importer in the world of industrial roundwood and tropical sawnwood. Much of the supply of temperate logs and sawnwood comes from Russia. However, countries elsewhere in the UNECE region are also looking eagerly at the burgeoning Chinese market. The China Timber Design Code, enacted in 2003, is expected to boost wood-based construction. In 1998 private ownership of houses was allowed for the first time in 50 years and the domestic market for forest products is expanding. Impacts of the Chinese wood products market developments are systematically analysed, chapter-by-chapter, throughout this *Review*.

China's exports are also affecting UNECE region markets, especially for value-added products such as furniture, which was directed mainly to the US (partly through partnerships with US manufacturers who have outsourced their operations to China). In fact, Chinese exports of wooden furniture tripled in the last few years and were blamed for the closure of many US furniture-manufacturing facilities. Other furniture companies have realized that in the current situation, their strength is in their marketing expertise and the channels they have developed. Hence some companies have shifted production to China and other Asian countries for import and distribution through their established networks. Meanwhile, in summer 2004, the US Department of Commerce imposed preliminary anti-dumping duties on wooden bedroom furniture imported from China.

1.3.2 *Consequences of EU expansion for forest products markets*

What difference will the accession of 10 new members, of which 8 are CEECs, make to the EU? The 20% increase in the EU trading bloc's population to 454 million, with subsequent establishment of an even larger internal market, should encourage trade in conjunction with general economic improvements and rising standard of living. This trend was already evident in forest products markets before formal accession in May 2004. As shown in the graph and table of apparent consumption, the bulk of these countries had already made significant progress towards integration. With the notable exception of panels, these countries per capita consumption rates are half those of western Europe (table 1.3.1). However, the trend is not equal among all accession countries, and not universal for all CEECs.

TABLE 1.3.1

Annual per capita wood products consumption, EU15 vs. newest "EU10", 2003

(m^3 or m.t./person/year)

Product	*EU15*	*New EU10*
Sawnwood	0.23	0.15
Wood-based panels	0.12	0.11
Paper and paperboard	0.20	0.08

Source: UNECE/FAO TIMBER database, 2004.

Immediate advantages of EU membership include:

- Opening of borders resulting in savings in transport time.
- Facilitation of value-added tax procedures.
- Removal of anti-dumping duties in place for certain CEECs' wood products.
- Freer movement of labour.
- Access to EU structural development funds for afforestation and forestry infrastructure, including forest owners associations, as well as for industrial development.
- Consistent quality and trade regulations.
- Increased market information.

In terms of forestland, the new EU10 have approximately 23 million hectares of forest, as compared to 113 million for the EU15. However, because a larger share of the EU15 forestland is unavailable for wood supply, in contrast to greater availability in the new EU10, the result is an almost 25% increase in the EU's forests available for wood supply (TBFRA 2000).[6]

[6] TBFRA 2000. UNECE/FAO Temperate and Boreal Forest Resource Assessment 2000. www.unece.org/trade/timber/fra/welcome.htm.

Nevertheless, accession is not a panacea and the "single" EU market remains diverse. Preparations for accession have occurring over the last five years, meaning that there were no abrupt changes, at least in forest product markets. However, there will be benefits from accession, including the advantages listed above, which will appear in forest products market statistics in the medium term.

Some new EU countries, including Estonia, the Czech Republic, Lithuania and Poland, have become powerful forest products producers over the last decade, due, in part, to foreign investment from other EU countries, and from even further abroad, e.g. Canada.

As elsewhere in the EU, the rising demand for roundwood has led to higher prices, and in mid-2004, prices were at record highs in the Baltic States. Restitution of forestland to private owners has progressed considerably and forest owners associations have developed. Many CEECs have either FSC or PEFC certification, or both, in order to meet export market demands for verification of sustainable forest management, and increasingly for verification of the legality of the sources of timber.

1.4 Policies affecting forest products markets

This *Review* continues to focus on government policies influencing forest products markets in the UNECE region. Building on a dedicated policy analysis chapter last year, the same issues are updated and new ones analysed in this *Review*. The report on policy issues is a basis for the annual Timber Committee Market Discussions, which will be conducted jointly with the FAO European Forestry Commission on 5 October 2004, under the theme, "Links between forest policy and market policy". The policy issues below are in the order in which they appear with more detail in the next chapter.

1.4.1 *Forest law enforcement, governance and trade*

The primary issue linked to forest law enforcement, governance and trade (FLEGT) is illegal logging, although there are many and complex issues of definition and scope that will not be addressed here. Worldwide, the cost in lost revenues to Governments due to illegal logging is estimated at $5 billion annually, and a further estimated $10 billion is lost to producing countries (World Bank 2001). Pressure from UNECE region Governments, industry associations, international organizations and non-governmental organizations is accelerating. An EU regulation, based on the EU FLEGT Action Plan to control imports of illegally sourced timber from specific countries, is in final preparation in the summer 2004.

Other countries have government initiatives to curtail both domestic and foreign illegal logging.

At its October 2003 session, the UNECE Timber Committee discussed this topical issue and decided to study the causes and extent of illegal logging and the trade of illegally sourced wood products in the UNECE region. A regional workshop is scheduled for 16-17 September 2004 and its conclusions and recommendations will be presented for action by the joint session of the Timber Committee and the FAO European Forestry Commission on 6 October 2004.

1.4.2 *Forest certification*

Although legality is only one aspect of forest certification, the issue of illegal logging has resulted in an increase in demand by Governments for certification through various purchasing programmes which specify certified forest products. Government purchase programmes can result in market changes, as witnessed by the specification by many Governments of minimal levels of recovered fibre in their paper purchases, which, in turn, generated a wave of recycling programmes and associated pulp and paper production changes.

The chain-of-custody attribution of certification schemes allows tracking of products from the forest to the consumer. Certification programmes have significant value for considerations such as comprehensive management planning, plant and animal biodiversity, protection of sensitive forest areas and social responsibility.

What is the possibility for mutual recognition between the two major certification schemes, the FSC and the PEFC? While PEFC is a programme of mutual recognition of national and international schemes under its umbrella, there appears no possibility between FSC and PEFC in the near term.

Despite the boost by government procurement policies, the weak link in certification continues to be the demand by end consumers. At the beginning of forest certification programmes approximately 10 years ago, the Timber Committee indicated that one of its major advantages was as a communications tool about the virtues of wood, including its sustainability, renewability and recyclability within the UNECE region. When consumers do not have an understanding of certification and certified forest products, this important link is missing. Unfortunately, within the UNECE region, public misperceptions about deforestation and degradation continue.

1.4.3 *Policies promoting the sound use of wood*

Led by trade associations and supported by organizations and Governments, promotion of the sound use of wood advanced in 2003. Some European organizations requested that ministers support an EU-wide programme to enhance the use of wood by removing barriers to its greater use in construction, furnishings, decoration and energy. CEI-Bois set out a Roadmap 2010 with a number of different directions to achieve greater market share and strengthen forest products industries. The Timber Committee and the European Forestry Commission continue to promote the sound use of wood, and held a seminar in 2003 to determine effective strategies.

Promotion of wood is essential to inform consumers of wood's renewability, sustainability and recyclability, and thereby gain, or at least maintain, market share. In North America, where wood consumption per capita is highest in the UNECE region, wood's total market share has declined by 2.7 percentage points to a level of 86% in new housing construction, based on square feet of construction of competing materials. Gaining at the expense of solid sawnwood have been concrete and steel (Wood Markets Monthly 2004).

1.4.4 *Research and development policies*

Promotion of wood is based upon developing new products to fit the changing needs in construction, furnishings, packaging and shipping, etc. The industry's capabilities to develop new products are constrained by reductions in funding for basic and applied research by Governments, which are a necessary complement to industry's own research. Although research gains over the last 50 years have been impressive, e.g. improved recycling technologies which have raised paper recovery rates to 50%, publicly funded research has diminished over the same period; it is not known whether private research, funded by the final beneficiaries, has expanded or contracted over this period. The relationship between public funding for research and development and industrial wood productivity is direct, and the gains over the last 20 years have been substantially less due to government spending on other priorities during a weak economic period (Skog 2002). In the eastern part of the UNECE region, it has been difficult to maintain research funding during the difficult economic and political transition period.

1.4.5 *Industry competitiveness and investment policy*

Investment needs are enormous in the forest products sector, especially in central and eastern Europe and the CIS. A host of government policies, e.g. to liberalize

foreign investment and to promote economic development of the private sector, are bearing fruit, and production and trade from and within these countries is increasing more rapidly than elsewhere in the UNECE region. Domestic economies are benefiting, as evidenced by rising consumption of forest products. Some apparent consumption of primary forest products such as sawnwood and panels is being transformed into value-added products and exported, primarily to the EU.

The flow of investment to developing countries outside the UNECE region, and also to CEECs, has pushed industries in western Europe and North America to seek additional competitive measures; for example, integration of the main product and residue chains along with bioenergy to maximize efficiency and profitability. Western forest products corporations, both in North America and western Europe, use their marketing skills to exploit new market and product opportunities, and use their production skills to maximize efficiency.

1.4.6 *Climate change policy*

Climate change policies witnessed new interest with positive signs that Russia would ratify the Kyoto Protocol. The UN Framework Convention on Climate Change adopted procedures for afforestation and reforestation in 2003. As a result of climate change policies, a carbon trade market is growing globally, which could have an impact on forestry practices in the UNECE region.

1.4.7 *Wood energy promotion*

Governments in the UNECE region have policies in place and are setting new policies to promote renewable energy sources, including wood-based energy. Their policies act through a variety of measures including reduced taxes and other incentives. In 1997 the European Union set a target of 12% of the EU's gross energy production from renewable energy sources by 2010.

The forest products industry is a leader in wood-based fuels and for centuries has used residues to dry sawnwood, heat factories and offices and, later, to turn machines through steam and electricity generated by wood-fired boilers. In North America the pulp and paper industry is 65 to 70% self-sufficient, while in Europe it is approximately 50% self-sufficient. These major energy consumers burn wood residues and spent cooking liquors, and could be 100% energy self sufficient in the right economic conditions (vis-à-vis comparative prices and costs of energy and traditional wood based products).

Again linked to rising fossil fuel prices, the forest products industry is improving energy production technology and in some periods is a net energy producer, selling surplus electrical energy to the local grid. New energy production technologies, such as gasification, are being refined.

In some Nordic installations, forest and mill residues are a stable energy source for electrical generation and district heating. Demand for these residues has been beneficial for forest and mill owners by providing an alternative market for what could have been wastes. However, at the 2003 Timber Committee Market Discussions, representatives of the panel and pulp and paper industries in Europe expressed concern over the availability of their raw materials at affordable prices.

1.4.8 *Trade policy and tariff and non-tariff barriers*

US government policies to promote exports came under scrutiny by the WTO in January 2004. As a result, the EU imposed retaliatory tariffs in March 2004 on over 1,600 US products, including 165 wood and paper products. At the time of writing, resolution of the dispute was still pending.

As imports of Chinese furniture gained greater market share in the US, furniture manufacturers and labour unions succeeded in instigating anti-dumping duties by the US Department of Commerce in June 2004.

The Softwood Lumber Agreement between the US and Canada in 2001 levied 27% tariffs on most Canadian sawn softwood exported to the US. However, as soon as the agreement became law, it came under attack. Subsequently, the North American Free Trade Agreement panel ruled partly in favour of the US in 2003. Later, a second panel ruled partly in favour of Canada. A new ruling by the panel in June 2004 has called for recalculation of the duties. Meanwhile, millions of dollars in duties which have been collected, remain in trust pending the outcome of negotiations. Both sides acknowledge that it will be difficult to ever fully reimburse the winning party, and managers of wood promotion campaigns hope that some portion of the duties will eventually be used to promote wood and its sound use in both Canada and the US.

Also affecting the forest products trade are non-market barriers set through the development and enforcement of environmental, social and health standards.

1.4.9 *Russian Forest Code*

During the transition period from 1990, the Russian forest industry has been almost completely privatized. However, forests and roundwood production remain under state control. In 2004 the Ministry of Economic Development drafted a new Forest Code that would enable the sale of forestland to private companies, in the context of an expansion of the use of concessions. The

State Duma is to consider the Code, but the issue has aroused a strong debate, inside and outside of Russia.

In September 2003, Russia removed export taxes on over 220 timber products. More products for export tax elimination were being considered, as well as elimination of import taxes on harvesting and wood-processing equipment (TTJ, 2003).

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Chapter 2
Policy issues related to forest products markets in 2003 and 2004[7]

Highlights

- Illegal logging occurs worldwide, including in the UNECE region, and an EU regulation to control imports of illegally sourced timber from specific countries is in preparation.
- Forest certification programmes expanded worldwide, spurred by both government purchasing programmes and requirements of major wood buying groups and retailers in the UNECE region.
- European lobbying organizations called upon ministers, "To support an EU wide promotion campaign on the enhanced use of wood through the removal of codes or other barriers governing the use of wood in the construction, furnishing, decoration and energy sectors".
- Development of structural and non-structural composite products is allowing the use of rapidly grown, low strength woods in the manufacture of large size, high-strength construction timbers and panels, with profound implications for forest management and plantation development.
- Despite the significant role of research for the continued development and competitiveness of the forest sector as a whole, funding for forestry research, and particularly wood utilization research, has declined markedly in the region in recent decades.
- Growing global competition in wood-based commodity products markets is forcing North American producers to re-examine long-established manufacturing and marketing strategies, resulting, e.g. in radical new thinking about the nature of paper manufacturing in the future.
- The global carbon trade market grew rapidly in 2003 and 2004, with an estimated total market value of $300 million in 2003.
- Energy markets and the international biofuel trade are developing rapidly as governments promote renewable energy sources; however, though positive for forestry profitability, this new reality means that wood fibre prices must be competitive with the price of wood as a fuel.
- The EU imposed retaliatory tariffs in March 2004 on over 1,600 US products, including more than 165 wood and paper products, following a WTO ruling that a US incentives programme to promote exports was an unfair trade subsidy.
- Due to sanitary and phytosanitary requirements resulting from increased vigilance and concern about environment and safety issues, some markets in developed countries are becoming difficult to access by developing countries.
- A controversial new Russian Forest Code would theoretically enable the sale of Russia's forestland to private companies.

[7] By Dr. Jim L. Bowyer and Dr. Ewald Rametsteiner.

Secretariat introduction

In last year's analysis it was pointed out that policies affect forest products markets and *vice versa*. It was noted that forest products markets are not only affected by traditional market forces, but by government policies as well. Because policies influence the production, trade, and consumption of forest products, they should be explicitly considered in the *Forest Products Annual Market Review* analysis. That line of thinking is expanded in this chapter based on the realization that markets and policies are also influenced by available technology that can serve to change the range of options available to policymakers, manufacturers, and marketers.

The secretariat would like to thank Dr. Jim Bowyer,[8] Professor, Department of Bio-based Products, University of Minnesota, USA, for leading the production of this chapter. Dr. Ewald Rametsteiner,[9] also a forest sector policy expert, Institute of Forest, Environment and Natural Resources Policy, University of Natural Resources and Applied Life Sciences, Vienna, Austria, was the co-author. Dr. Rametsteiner also co-authored Chapter 9, on certified forest products.

For their contributions to this chapter, we also thank Mr. Russell Taylor, President, R.E. Taylor & Associates, Ltd. and Managing Director, International Wood Markets Research, Inc., Vancouver, B.C., Canada, Dr. Peter Ince, USDA Forest Service, Forest Products Laboratory, Madison, Wisconsin, USA, and Professor Sten Nilsson, International Institute for Applied Systems Analysis, Laxenburg, Austria.

2.1 Chapter overview

This chapter focuses on the principal policies that influence markets for forest products, on the market forces most influential in driving change in established global markets and in public policy, and on new and emerging technologies that are likely to impact both markets and forest-related policy.

Issues discussed in the previous year's report are reaffirmed. However, because of space limitations the reader is referred to last year's *Forest Products Annual Market Analysis, 2002-2004*[10] for further discussion of those topics. Included in this year's report are:

Forest law enforcement, governance and trade;
Forest certification;
Policies promoting the sound use of wood;
Research and development related policies;
Industry competitiveness and investment policy;
Climate change policy;
Wood energy promotion policy;
Trade policy and tariff and non-tariff barriers;
Phytosanitary measures, and
Russia – developing a new forest code

2.2 Forest law enforcement, governance and trade

Issues related to forest law enforcement, governance and trade (FLEGT) are primarily those linked to the illegal logging problem. In 2001, the World Bank estimated that the loss of revenue due to illegal logging costs governments $5 billion annually, with a further $10 billion lost to the economies of producing countries (World Bank 2001).

As already noted in last year's *Annual Market Analysis*, pressure from the international community to curtail illegal logging is growing. An EU regulation to control imports of illegally-sourced timber from specific countries is in final stages of preparation, with a few crucial issues still unresolved. The regulation is intended to establish border controls and will form the legal basis for the licensing scheme and partnership agreements envisaged in the EU FLEGT Action Plan. However, several observers have pointed out that the impact of banning illegal timber from countries engaging in partnership agreements with the EU on the topic could prove negligible if restricted only to logs and sawnwood. According to the World Bank, to expand the licensing scheme to include all product groups – including furniture and pulp and paper – would be essential, but at the same time would lead to additional administrative burdens, possibly similar to chain-of-custody tracking systems in forest certification (Blaser 2002).

Issues related to trade of products made of illegally logged wood are almost certain to grow in importance within UNECE region countries as production of an array of wood products shifts increasingly to Asia and eastern Europe. Some emerging producer countries in these regions, especially China, have come under increased scrutiny concerning their processing of wood raw materials obtained from illegal sources. The success of market-focused policy initiatives to limit trade of illegally sourced wood will be strongly influenced by support (or lack thereof) on the part of governments, business and industrial firms, as well as individual consumers within the major industrial wood consuming nations.

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[10] www.unece.org/trade/timber/docs/fpama/2003/fpama2003a.htm.

2.3 Forest certification

Forest certification programmes expanded significantly worldwide during 2003-2004 (see chapter 9), spurred by both government purchasing programmes and requirements of major wood buying groups and retailers in the UNECE region. Concerns about illegal logging have served to increase interest in forest certification, although illegality is only one of many factors considered in certification programmes.

In mid-July 2004, some 45% and 18% of European and North American forests, respectively, were certified by one or more of the leading forest certification schemes. However, in the tropics the percentage of certified forests, which is largely plantations, remains low. Despite gains, certified forests still account for less than 6.5% of the total extent of forests globally. Continued growth in certified forest area is needed to ensure an adequate volume of certified products to support growth in world markets.

Discussion and debate about forest certification are ongoing, with several persistent questions remaining related to the long-term market effects of certification. Despite continuing doubts about the value and future viability of forest certification from a market perspective, there is some evidence that certification programmes are having a positive impact on forest management practices around the world (Rametsteiner and Simula, 2003). Forest managers are now asked to consider factors that were previously ignored or given only scant attention; issues related to more comprehensive management planning, plant and animal biodiversity, retention of sensitive areas, and social responsibility have all become more important as certification processes have become more prevalent.

Forest certification as a voluntary non-governmental tool to improve forest management continues to receive support from governments (and other stakeholders), as certification achieves similar goals of other governmental policies. Governments in several countries have supported the certification of public forests, but they have otherwise generally not attempted to control the development of forest certification schemes.

Government purchase of timber is estimated to account for 18% of timber imports into G8 countries, worth $20 billion annually, thus making it a formidable economic force in the timber market (Toyne et al. 2002). Several governments at local, provincial and national levels in the US and Europe have increasingly facilitated the development of demand for certified forest products through specific public procurement policies. However, some developing countries see these measures as effectively constituting non-tariff barriers to trade.

2.4 Policies promoting the sound use of wood

Largely based upon the credentials of wood as an environmentally sound and renewable material, forest owners and the forest industry have continued to press for policies promoting the sound use of wood. In a recent position paper a group of European lobby organizations has called upon ministers "To support an EU wide promotion campaign on the enhanced use of wood through the removal of barriers [e.g. *Comité Européen de Normalisation* (CEN) codes[11]] governing the use of wood in the construction, furnishing, decoration and energy sectors" (COPA 2003).

A study in the context of the CEI-Bois Roadmap 2010 on regulatory barriers to increased use of wood in Europe concluded that there are no direct regulatory barriers to the use of wood or wood-based products in the construction of residential buildings. This is primarily because governments, through their regulations, cannot be prejudiced toward any particular material. Despite this, there are numerous limitations to the use of wood and wood-based products. The principal regulatory limitations are perceived to be with regard to fire and acoustic performance, particularly in multi-story dwellings. An important factor, however, is uncertainty and lack of in-depth knowledge of building regulations relevant to the use of wood in construction, as well as a lack of awareness by regulators and industry of the influences of regulations on the use of different materials (BRE 2003).

Differences between sets of regulations act as barriers to common practice across Europe. Technical solutions developed for one country cannot necessarily be applied in another. Specifications that often create an effective barrier for the enhanced use of wood, e.g. in multi-storage buildings, are usually embedded in a complex web of related specifications. The harmonization of functional specifications in standards across borders is clearly important to more efficient use of wood.

Barriers to expanded use of wood in building construction also exist in North America. However, because of a long history of wood predominance in residential construction, and the existence of relatively few regional building codes, barriers posed by lack of knowledge and regulations are generally less onerous than in the EU. Choices of building materials are influenced primarily by initiatives arising from the private sector. A prime example in the US is the LEED (Leadership in Energy and Environmental Design) Green Building Rating System. LEED™ is a market-driven US national certification programme developed to allow

[11] European Standardization Organisation has established building construction standards under the CEN codes.

quantification and verification of green building claims and to encourage environmental responsibility. LEED has become a requirement by increasing numbers of local and regional governments and institutions for projects involving public funding.

Encouragement of continuous improvement in the efficiency of wood use from a policy perspective requires both a reasonable level of public support for research oriented to wood products, and the existence of mechanisms for amending codes and other regulations to allow for the introduction of new products and construction practices. The development of wood-based composite products provides an example of significant advancement in the sound use of wood that has, in turn, dramatically affected wood markets while also providing new options to forest managers and policy makers.

New developments related to wood-based composite products technology is associated with myriad products that can be substituted for products made of solid wood. Such products include oriented strand board (OSB), laminated strand lumber, parallel strand lumber and laminated veneer lumber (LVL). Composites are generally made from fast-growing low-density woods of small diameter and often have properties superior to solid wood. Such products are also much less impacted by the presence of juvenile wood than are solid wood products. These realities translate to decreasing importance of large diameter logs as a raw material for the manufacture of structural and non-structural panels, lumber and timbers. Thus, composite products technology is likely to stimulate further interest in plantation establishment while at the same time further reducing interest in long rotation periods on industrial forestlands.

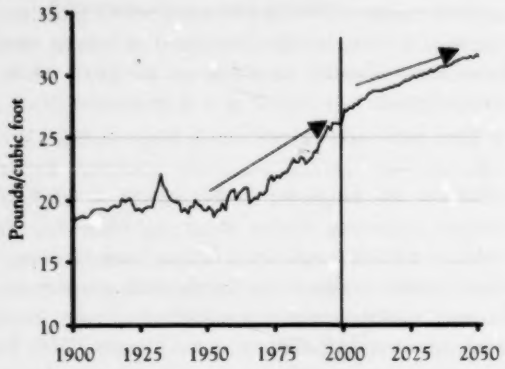
2.5 Research and development policies

The development of policies aimed at the sound use of wood is related to the issue of publicly funded research. The primary objective of virtually all wood products research programmes globally is improvement in the efficiency of wood use, whether through development of new conversion technologies, product designs, building codes and application guidelines or durability enhancements. Such activity has yielded substantial gains.

In the US, technological developments in the wood science and technology field over the past century have been impressive. Advances in process and product development over the past 50 to 60 years have increased by about 40% the quantity of primary products (e.g. sawnwood, panels, and paper) obtained from a given quantity of industrial roundwood (graph 2.5.1). Moreover, recycling technology has increased waste paper recovery and reuse rates nationally by 50 to 65% (to 50 and 37%, respectively) in the last 15 years alone. Additionally, the development of wood composites and engineered structural materials has allowed better utilization of low value resources to create high value materials, thereby enhancing forest management options. All of these developments have served to greatly extend the forest resources of the US. Put another way, present forest harvest levels would have to be many-fold greater if the advances in process development of the past six decades had not occurred.

GRAPH 2.5.1

United States industrial wood productivity, 1990-2050



Note: Industrial wood product output in pounds (weight) per cubic foot volume of industrial roundwood input.

Source: Skog, K. US Forest Products Laboratory, 2002.

In Europe, recovered paper accounts for more than 40% of annual paper production and is predicted to increase to 45% in the next three to five years. The aim of the Confederation of European Paper Industries (CEPI) is to increase the level of paper recycling in Europe up to a recovery rate of 56% by 2005 (CEPI 2003).

Despite the significant role of research in the continued development and competitiveness of the forest sector as a whole, funding for forestry-oriented research, and for wood utilization research in particular, has declined markedly in the UNECE region in recent decades. For example, in the US over the last 20 years, funding for forest products research by the US Department of Agriculture (USDA)-Forest Service has declined by almost 30%. Moreover, the number of USDA Forest Service research scientists involved in wood science and technology-oriented research has declined by more than 75% since 1985 (National Research Council 2002). Industry funding of research has also declined over this period.

2.6 Industry competitiveness and investment policy

Investment in emerging market economies, including central and eastern European countries, Russia and China, is increasing considerably. Jaakko Pöyry Consulting estimates that investments in the Russian forest industry (including logging, woodworking and pulp and paper) amounted to $540 million in 2002, compared to investments in Finland ($1,300 million in 2001, not including the logging industry) (Jaakko Pöyry Consulting, 2003). Thus, the investment requirements in central and eastern European countries in all industry sectors are huge.

Taylor (2004) estimates that 5.5 million m^3 of new sawnwood production capacity is currently emerging from investments scheduled for 2002-2006, 75% of which are in western Russia. Likewise, the pulp, paper and packaging industries are continuing to establish their presence in these growing markets. The Italian furniture industry is continuing to shift considerable production capacity to eastern European countries, such as Romania.

Specialized banks and export credit agencies have, however, attracted criticism by environmental NGOs, which highlight the absence of social or environmental standards for projects that are supported through such institutions (FERN 2004).

The flow of capital investment to new producing regions, and growing global competition in wood-based commodity products markets, is forcing a reassessment of long-established manufacturing and marketing strategies in the developed countries. Within the US, targeted research programmes have been cooperatively developed and funded by the federal government and the pulp and paper industry to develop new approaches.

One result in North America is radical new thinking about the nature of paper manufacturing in the future. Envisioned is transformation of the entire industry to a biochemicals/biofeedstocks/bioenergy/pulp and paper industry, with individual mills operating as integrated biorefineries. Under the new paradigm, manufacturing centres will have the capacity to produce electricity, liquid fuels (such as ethanol), and a wide variety of bio-derived chemicals and chemical feedstocks, in addition to pulp and paper. Paper will effectively become only one of a number of (diverse) co-products.

The biorefinery is quickly moving beyond the concept stage, with a major research effort now underway involving both wood products and the agricultural sectors of the US and Canadian economies. With recognition that this development represents a potential solution to agricultural policy questions as well as forestry and energy policy, a fast track to commercialization is being pursued.

2.7 Climate change policy

With recent positive signals by Russia that the Kyoto Protocol might be ratified, thereby making the Protocol legally effective, climate change policies have received renewed interest. However, it is still not clear when a decision will be made by Russia and how the treaty might be implemented.

Climate change policies in Canada, Japan and European governments are still under development. The latter have signalled their willingness to enter the market, and have pledged significant resources to buy emission reductions, either directly or through outside intermediaries (Lecocq, 2004).

Meanwhile, in December 2003 the UN Framework Convention on Climate Change (UNFCCC COP9) adopted modalities and procedures for afforestation and reforestation project activities under the Clean Development Mechanism (CDM), in order to meet the requirements of the first commitment period of the Kyoto Protocol. Thereafter, the CDM Executive Board began considering projects related to Land Use, Land Use Change and Forestry (LULUCF).

Climate change concerns are currently having little impact on forest management practices in the US. However, a considerable research effort is underway to quantify carbon flows and storage within forests under various management regimes. This work, in combination with recent and ongoing development of carbon storage-related criteria and indicators for North American forests, makes it likely that climate change issues will at some point become a part of forest management planning in North America. Impacts on markets and trade are as yet uncertain.

The carbon trade market is growing globally, with increasingly rapid growth reported in 2003 and 2004. The total volume of transactions reached about 301 million metric tons of CO_2 ($MtCO_2$) equivalent. Total market value in 2003 is estimated at around $300 million (nominal prices) (Lecocq 2004). Project-based transactions account for 98% of the total volume of assets exchanged since 1996. About 50% of all projects were located in Asia, followed by Latin America (24%) in 2003 to 2004. By far, the majority of these projects were CDM projects. Only about 4% were LULUCF-related projects. Market buyers are mainly Japan, the Netherlands and the Carbon Finance Business (CFB) of the World Bank (Prototype Carbon Fund and Community Development Carbon Fund) (Lecocq 2004). The partners have established trading platforms and trade CO_2, regardless of the legal status of the Kyoto Protocol, in order to push ahead and make trading operational. It is recognized that waiting until the Kyoto Protocol enters into force could result in losing several years.

Strong NGO resistance to carbon sink projects (especially those linked to plantations) and large-scale hydropower projects will likely make such projects less attractive for Carbon Emission Reduction (CER) buyers.

The working group of an EU Advisory Committee (EU 2004) has recently focused on carbon sequestration benefits associated with substitution of wood for non-wood materials. It was concluded that the substitution impact of industrial wood products may be as large as 0.25 giga tons of carbon per year.

2.8 Wood energy promotion policies

Energy markets and the international biofuel trade are developing rapidly as countries promote renewable energy sources. While some concerns about future supplies of wood fibre have been expressed by paper and panel producers worldwide, it is increasingly apparent that bioenergy production will increase substantially in the relatively near term.

Within the US, a federal government-led effort to develop mobile biofuel burning generators is in early stages, driven by the need to conduct silvicultural treatments on vast areas of forestland that have long been protected from wildfire. Pulp and paper manufacturers are also pursuing development of technologies for substantially increasing energy production from wood residues and chemical pulping liquors. Such mills across North America are presently 65 to 70% energy self-sufficient, using bark and wood residues and organic elements of spent cooking liquors as sources of fuel; only 30 to 35% of energy needs are provided via the national energy grid. In the near future, through gasification of spent liquor, chemical pulp and paper mills are expected to become net producers of energy, selling surplus energy to regional markets.

Within Europe, major branches of the forest industry are steadily moving toward higher levels of energy supply from renewable energy sources (RES). The share of biomass in total primary energy consumption of all CEPI members, representing a large majority of pulp and paper producers across Europe, was 49% in 2002. The target set by CEPI is 56% in 2010 (CEPI 2003).

Demand continues to increase for the use of forest biomass for energy in Europe. This is partly driven by targets to fulfil national commitments under the Kyoto Protocol. It is estimated (EU 2003) that the total technical potential of energy substitution by bioenergy from agriculture, forests and other residues could represent 60-180% of the total EU15 reduction of CO_2 equivalent per year required under the first commitment period of the Kyoto Protocol.

In 1997, the European Commission adopted a target to double the share of RES to 12% of the gross EU energy production by 2010, as outlined in its "Energy for the Future" White Paper. In 2001 the EU adopted a directive on electricity from RES (2001/77/EC) with the target of increasing the share of RES from 13.7% (1997) to 22% by 2010. Indicative targets were set by each member state. In 2003 an EU Directive was adopted that set targets for alternative fuels, such as biofuels for transportation (2003/30/EC). Further EU directives related to RES and relevant for the forest sector are the Directive on Emissions Trade (2003/87/EC) and the Directive on Promotion Incentives for Combined Heat and Power Systems.

Whether as a result of business initiatives or government policies, or both, demand for wood as a source of bioenergy is likely to increase in North America and Europe. For wood-based industries, and especially the pulp and paper and panel industries, this likelihood creates a competitive alternative use for their raw material. Though a positive development from the standpoint of profitability of forestry, this new reality will mean that the price of wood fibre will have to be competitive with the price of wood as a fuel.

2.9 Trade policy and tariff and non-tariff barriers

Many governments have programmes in place to promote foreign trade of wood-based products. For example, the New Zealand government has been conducting and funding market expansion activities for radiata pine in Europe, with efforts centred on the furniture industry. British Columbia and the Canadian government are also funding ongoing market access and market expansion projects in the US, Europe and other offshore markets via various industry associations.

These kinds of initiatives carry with them a certain level of risk, as illustrated by a current major trade dispute between the US and the EU. The EU imposed retaliatory tariffs on 1 March 2004 on over 1,600 US products, including more than 165 wood and paper products. The tariffs were imposed in response to the foreign sales corporations/extraterritorial income provisions of the US tax code (FSC-ETI) that provided incentives to promote exports, but which were found by the WTO in January 2004 to be an unfair trade subsidy. The major US forest products trade association, AF&PA, campaigned to repeal FSC-ETI, and measures to repeal recently passed the US Senate and House of Representatives. The ultimate resolution of this dispute is still pending in July 2004.

The massive development of production capacity in China has led to unprecedented growth of Chinese imports into the US. For instance, in the 10-year period from 1993 to 2003 the value of Chinese furniture exports

to the US increased nearly 25-fold, to $3.3 billion. Similarly, in the five-year period from 1998 to 2003, the imports of hardwood moulding flowing from China to the US increased by 47 times (Meyer 2004). These and other developments have prompted the US government to consider tariff measures under the anti-dumping category in some market segments. As a result of a recent action, Chinese exporters of wooden bedroom furniture face stiff anti-dumping penalties on exports to the US market. Duties, up to about 200%, were announced in June 2004 by the US Department of Commerce.

Discussions of international trade in forest products tend to focus on tariff and non-tariff measures, especially in relation to the WTO trade negotiations. As part of the EU Trade Directorate-General exercise to carry out sectoral impact assessments of proposed WTO negotiations in the Doha negotiations, a study of the potential economic, social and environmental consequences for forests from ongoing WTO negotiations is now underway. Initial findings reveal that tariffs on most wood raw material products have already been abolished or significantly reduced by previous negotiation rounds. A further reduction of tariffs as the result of the Doha negotiations is unlikely to have a major influence on forest consumption/production, because WTO-related import tariffs are already very low and sometimes even zero.

Another study (Katila and Simula 2004) notes that value-added products face, on average, higher tariffs than less processed products such as logs, lumber and veneer in developed countries. The overall level of applied tariffs is higher in developing countries than in the industrialized regions, with considerable differences in the applied rates between regions. As a result of reduced tariff barriers, new export market opportunities would likely increase wood and forest products production in the forest-rich, net-exporting countries.

Non-market barriers, such as those set through environmental, social or health standards, are considerably more difficult to negotiate, and remain one of the major obstacles to progress in the Doha negotiations.

2.10 Phytosanitary measures

The WTO Sanitary and Phytosanitary (SPS) Agreement aims at clarifying inspection and quarantine control procedures. The profile of SPS measures has risen in recent years, partly as a response to increased vigilance and concern about environment and safety issues. Developing countries note that some markets in developed countries are becoming difficult to access due to SPS requirements. Strict health and phytosanitary controls concern mainly logs and products such as mushrooms and nuts, as well as products used in the pharmaceutical industries (Rytkönen 2003).

Concern is not limited to risks of wood transport from developing countries. Regulations also impact trade between North America and Europe in order to prevent transmission of a range of forest pests across the Atlantic. In an effort to streamline trade, on 1 February 2004 the EU implemented Commission Decision 2004/95/EC, which details an agreement with the Canadian authorities for a one-year trial period for a new coniferous sawnwood importing system that does not require consignments arriving in the EU from Canada to be accompanied with a phytosanitary, mill or industry certificate (UK Forestry Commission 2004).

Implementation of the newly developed standard, "Guidelines for Regulating Wood Packaging Material in International Trade", International Standard for Phytosanitary Measures (ISPM) No. 15, is making further progress. Canada has published its directive regulating wood packaging material imports from all countries other than the US. The Directive came into effect on 2 January 2004. The EU also announced amendments to the Plant Health Directive, including implementation of ISPM 15 for wood packaging material and dunnage. Implementation, subject to final adoption in July, will be in March 2005.

2.11 Russia: developing a new forest code

As noted above, the Russian forest industry is almost completely privatized, although forests and roundwood production remain under state control. Now Russia is bracing for the privatization of its forests. A new draft Forest Code, developed mainly by the Ministry of Economic Development, was considered by the State Duma in 2004. The decisions taken with regard to this Forest Code will determine the legal framework for the world's largest forest resource and one of the least used, and are therefore of interest to the UNECE region as a whole.

An initial version of the new Forest Code, approved by the government in early spring 2004, referred directly to private ownership of forestland. If the draft code became law, it would have enabled the sale of up to 90% of forests to private companies (Kagarlitsky 2004). Up to 30% of Russian forests may be privatized as soon as the new Forest Code is implemented, expected by 2006, according to the head of the State Duma Natural Resources Committee (Pravda 2004). However, in late July 2004 the Russian Head of State and the Chair of Parliament announced that references to privatization would be deleted from the Forest Code proposal. A separate statement by the Ministry of Economic Development and Trade of Russia, responsible for the preparation of separate legislation on the privatization of

Russian forests, announced that a maximum of 10-15% of forests could be privatized (Nilsson, 2004).

Although the new Forest Code has not been finalized, it is clearly a step toward expanding Russia's forest products industry, from a contribution of $10 billion to national GDP in 2003 to a nationally established target of $100 billion by 2025 (Taylor 2004). The proposed Russian forestry legislation allows for awarding timber-cutting licenses, which is an important incentive for foreign investment. However, many questions remain about the investment risk in Russia (Taylor 2004).

Environmental NGOs are concerned that the proposed Forest Code will decrease the level of protection of forests and increase existing problems of illegal logging and trade in illegal timber.

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Chapter 3
Continued strength in United States housing and growing strength in eastern European construction: Economic developments influencing forest products markets in 2003 and 2004

Highlights

- Global recovery started in the second half of 2003 after the economic uncertainties created by the conflict in Iraq and the outbreak of the SARS epidemic in Asia had dissipated.
- The United States and Asian economies remain the main engines of global growth, while continental western Europe is lagging behind in the cyclical upturn.
- The disappointing overall performance of most the EU-15 Member States contrasts with the strong economic growth in the 10 countries that joined the Union at the beginning of May 2004.
- In the US, the annual increase in real GDP accelerated to 3.1%, while in contrast, the euro area remained the principal "weak spot" of the global economy in 2003.
- Forty-year lows in US interest rates resulted in best housing market ever in 2003, with 1.9 million starts.
- 2004 residential construction started off strong in the US, but most analysts expect interest rates to trend upward as the economy improves, which will cool housing beginning in the latter half of 2004 and continuing through 2005.
- Non-residential construction sector in the US is expected to strengthen with the economy in 2004, following two consecutive years of contractions.
- In Europe, overall construction markets contracted in 2003, a reflection of the poor economy.
- Weakness was concentrated in new residential construction in Europe – a reflection of the weak job market and lack of any substantial income growth.
- The best construction sector in Europe was civil engineering as infrastructure spending increased in 2003 with further increases expected in 2004.

Secretariat introduction

The secretariat of the UNECE/FAO Timber Branch wishes to thank Mr. Dieter Hesse, UNECE Economic Analysis Division, for reviewing the analysis in the first section of this chapter, which is largely based on that Division's *Economic Survey of Europe*[12]. The full text of the *Survey* is available on the UNECE website.[13] We also express our appreciation, once again, to Dr. Al Schuler,[14] US Department of Agriculture, Forest Service and Mr. Craig Adair,[15] APA–The Engineered Wood Products Association, for the second section of this chapter, focusing on construction developments.

3.1 Economic developments in 2003

3.1.1 *The global context*

A global recovery started in the second half of 2003 after the economic uncertainties created by the conflict in Iraq and the outbreak of the SARS epidemic in Asia had dissipated. Rising activity was accompanied by increases in business and consumer confidence, and was mirrored in stronger demand and rising prices for industrial raw materials and especially crude oil. There was also a rebound of equity prices, which improved the financing conditions for enterprises.

Global economic activity continued to be supported by expansionary economic policies, especially in the US, which has been leading the recovery. The buoyancy of the Asian economies, notably the continued boom in China and the unexpectedly strong recovery in Japan, has also underpinned the global recovery.

In the UNECE region, economic activity continued to be marked by pronounced differences among the major economies and subregions in 2003, with robust growth in the US contrasting with only modest growth in the euro area, which remained the principal "weak spot" of the global economy in 2003.

The global recovery is expected to continue in 2004 and 2005, but there are some important downside risks.

3.1.2 *Economic developments in the UNECE region in 2003*

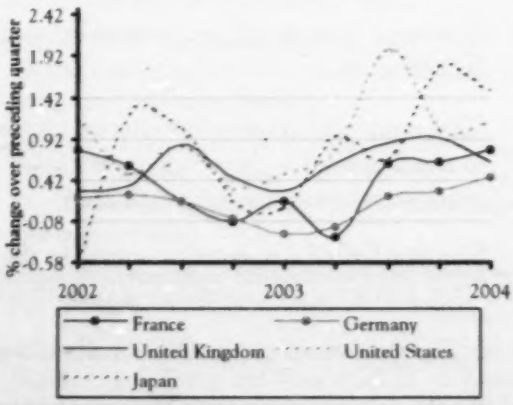
3.1.2.1 *Western Europe*

In the euro area, a cyclical recovery started in the second half of 2003, following a slight contraction of real GDP in the first half. The turnaround was led by exports and a rebound in fixed investment and stockbuilding. In spite of the strong appreciation of the euro, exporters benefited from the strengthening momentum of world trade. Business investment was supported by favourable financing conditions and improved profitability. Overall growth in domestic demand was held back, however, by the weakness of consumer spending against the background of rising unemployment and uncertainty about the prospects for pensions and health care, which depressed consumer confidence. For the year as a whole, real GDP rose by only 0.5% compared with 2002. This mainly reflected weak growth in France, Germany and Italy, the three largest economies of the euro area (graph 3.1.1). The dampening effects of the euro appreciation on economic activity in the euro area are showing up in a sizeable negative growth contribution of changes in real net exports in 2003.

Against the background of moderate growth prospects and low inflation, the stance of monetary policy was further relaxed in June 2003, when the European Central Bank (ECB) reduced its main refinancing rate by 50 basis points to only 2%. But this monetary stimulus was largely offset by the effective appreciation of the euro. The stance of fiscal policy was slightly restrictive in 2003.

GRAPH 3.1.1

Quarterly changes in real GDP, 2002-2004



Note: Data are seasonally adjusted.

Sources: National statistics, Eurostat and New Cronos Database, 2004.

[12] Economic Survey of Europe, (2004 No. 1). Economic Analysis Division, UNECE, Geneva, Switzerland.

[13] www.unece.org/ead/ead_h.htm

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Outside the euro area, in the United Kingdom, real GDP increased by 2.1% in 2003. Robust growth of private consumption and government spending remained the principal sources of economic growth. Private consumption continued to be supported by favourable developments in the labour market and low interest rates. The continuing surge in house prices, moreover, continued to facilitate access to consumer credit (mortgage equity withdrawals). House prices rose on average by some 16%, compared with 25% in 2002. Monetary policy was tightened somewhat in late 2003, largely designed to pre-empt a rekindling of inflationary pressures.

For the European Union (EU15) as a whole, real GDP rose by 0.8% in 2003, slightly more than for the euro area because of the resilience of the United Kingdom to the global downturn during 2002. In western Europe as a whole, real GDP rose by 0.9% in 2003 compared with the preceding year (table 3.1.1).

3.1.2.2 *Central and eastern Europe*

The disappointing overall performance of most of the traditional EU-15 Member States contrasts with the strong economic growth in the eight countries from central and eastern Europe that together with Cyprus and Malta joined the Union at the beginning of May 2004. Real GDP in these eight countries combined rose by 3.6% in 2003, up from 2.5% in 2002.[16]

Economic activity in eastern Europe as a whole strengthened in 2003, aggregate GDP growth accelerating to 3.8%, up from 3% in 2002. While all the east European economies had positive growth rates in 2003, economic performance varied considerably among them, with particularly dynamic growth in Latvia and Lithuania (table 3.1.2).

As in 2001 and 2002, domestic demand remained the principal source of growth throughout the region. Thanks to the ongoing restructuring of these economies and the expansion of their productive capacity, domestic suppliers were able to benefit from the strong domestic demand. Improved financial intermediation and a booming credit market, a consequence of successful banking reforms, also contributed to the general strengthening of economic activity in the region. Some east European economies also were able to significantly raise their exports despite the continuing weakness of the west European economies, their main trading partners. The correction of large fiscal deficits remains a key issue in many countries of central and eastern Europe.

TABLE 3.1.1

Changes in real GDP in the developed market economies, 2002-2004

(Percentage change over previous year)

	2002	2003	2004
France	1.2	0.2	1.7
Germany	0.2	-0.1	1.7
Italy	0.4	0.5	1.6
Austria	1.4	0.9	1.9
Belgium	0.7	1.0	1.9
Finland	2.2	1.4	2.6
Greece	3.8	4.0	4.1
Ireland	6.9	2.3	3.8
Luxembourg	1.3	1.2	2.0
Netherlands	0.2	-0.8	1.0
Portugal	0.4	0.8	1.4
Spain	2.0	2.4	3.0
Euro area	0.9	0.5	1.9
United Kingdom	1.7	2.1	2.8
Denmark	2.1	0.3	2.2
Sweden	1.9	1.6	2.4
European Union	1.1	0.8	2.1
Cyprus	2.0	2.0	3.4
Iceland	-0.5	1.9	3.7
Israel	-0.8	0.8	1.9
Malta	1.7	0.8	2.7
Norway	1.0	0.4	2.9
Switzerland	0.2	-0.4	1.6
Turkey	7.8	5.0	4.9
Western Europe	1.3	0.9	2.2
Canada	3.3	1.7	3.1
United States	2.2	3.1	4.6
North America	2.3	3.0	4.5
Japan	0.1	2.3	2.1
Total above	1.6	2.0	3.2
Memorandum items:			
EU acceding countries-10	2.5	3.6	4.2
Enlarged EU-25	1.2	1.0	2.3
Western Europe and North America	1.8	2.0	3.4

Notes: Forecasts are those of national conjunctural institutes or government forecasts associated with the central budget formulation. Aggregates are UNECE secretariat calculations, using PPPs obtained from the 1996 European Comparison Programme.

Sources: Eurostat; OECD national accounts; national statistics; European Commission, *European Economy*, No. 5 (Brussels), 2003; OECD *Economic Outlook* No. 74 (Paris), December 2003; Consensus Economics, *Consensus Forecasts*, 12 January 2004; *The Economist*, 5 February 2004.

3.1.2.3 *CIS*

Aggregate real GDP in the CIS grew by 7.6% in 2003, making it one of the fastest growing regions in the world. A combination of favourable external conditions (especially higher export prices for oil and gas) and a continuing strong recovery in domestic demand contributed to this outcome. Thanks to the strength of its domestic demand and its impact on imports, Russia's role

[16] These growth rates are the same if Cyprus and Malta are included in the aggregate.

as an engine of growth for the neighbouring CIS economies increased in 2003. Real GDP in Russia rose by 7.3% in 2003, a performance that was also underpinned by an expansionary monetary policy. There were also signs of a deeper and more extensive restructuring of the Russian enterprise sector, partly in response to growing competitive pressure.

Other CIS economies were also unusually buoyant in 2003. The enduring buoyancy in domestic demand, reflecting growing consumer and investor confidence in many of the CIS economies, was also a sign that the difficult reforms in these transition economies are finally starting to bear fruit. Several years of strong growth have also contributed to some improvement in living standards in the region.

3.1.2.4 North America

In the US, the rate of economic expansion accelerated in the second half of 2003, supported by robust growth of domestic demand and exports. In the event, real GDP rose by 3.1%, compared with the preceding year. Personal consumption expenditures were bolstered by income tax cuts, the favourable wealth effects from higher equity prices and the sustained rise in house prices. Business spending on equipment and software rose strongly helped by improved profitability and favourable financing conditions. Low interest rates continued to stimulate growth of residential investment. The improved export performance was supported by the depreciation of the dollar (graphs 3.1.2 and 3.1.3). But in the face of robust growth of domestic demand for foreign products, there was a further rise of the current account deficit to a level corresponding to some 5% of GDP.

The output recovery under way since early 2002 continued to have only little positive impact on demand for labour in the course of 2003. On average, employment in the whole economy stagnated in 2003 compared with the preceding year, following declines in the two preceding years. The mirror image of the "jobless" recovery has been very strong productivity growth, which held unit labour costs and inflation in check and helped to improve business profitability.

Fiscal policy in the US remained strongly expansionary in 2003. This, in conjunction with cyclical factors, entailed that the general government budget deficit rose to a level corresponding to 4.8% of GDP in 2003. The Federal Reserve has left monetary policy unchanged since late June 2003, when the target for the federal funds rate was reduced by 25 basis points to 1%, the lowest level in 45 years.

TABLE 3.1.2

Changes in real GDP in eastern Europe and the CIS, 2002-2004

(Percentage change over previous year)

	2002	2003[1]	2004*f*
Eastern Europe	3.0	3.8	4.5
Albania	4.7	6	6
Bosnia and Herzegovina	3.7	3.2	4
Bulgaria	4.8	4.8	5.3
Croatia	4.6	4.7	5
Czech Republic	2.0	3.0	2.8
Estonia	6.0	4.5	5-6
Hungary	3.5	2.8	3.3
Latvia	6.1	7	6-7
Lithuania	6.8	8.9	6.2
Poland	1.4	3.7	5
Romania	4.9	4.8	5.5
Serbia and Montenegro	3.8	1	3-4
Slovakia	4.4	4.1	4.1
Slovenia	2.9	2.6	3.6
The FYR of Macedonia	0.9	3.1	3-4
CIS	5.2	7.6	5.7
Armenia	12.9	13	7
Azerbaijan	10.6	11.2	9
Belarus	5.0	6.8	6-7
Georgia	5.5	8.6	4.5
Kazakhstan	9.9	9.1	7
Kyrgyzstan	–	6.7	4.1
Republic of Moldova	7.8	6.3	5
Russian Federation	4.7	7.3	5.5
Tajikistan	9.5	10.2	8
Turkmenistan[2]	19.8	17	...
Ukraine	5.2	8.5	4.8
Uzbekistan	4.2	5	6
Total above	4.4	6.1	5.2
Memorandum items:			
EU acceding countries	2.5	3.7	4.3
Baltic states (BS-3)	6.4	7.3	6.1
Central Europe (CE-5)	2.2	3.4	4.1
South-east Europe (SEE-7)	4.5	4.3	5.1
CIS without Russian Federation (CIS-11)	6.5	8.2	6.1
Caucasian CIS countries (CCIS-3)	9.5	10.8	7.2
Central Asian CIS countries (CACIS-5)	7.5	7.9	6.9
Three European CIS countries (ECIS-3)	5.2	8.0	5.3

Notes: Forecasts are those of national conjunctural institutes or government forecasts associated with the central budget formulation. Aggregates are UNECE secretariat calculations, using PPPs obtained from the 1996 European Comparison Programme

1 Preliminary estimates.

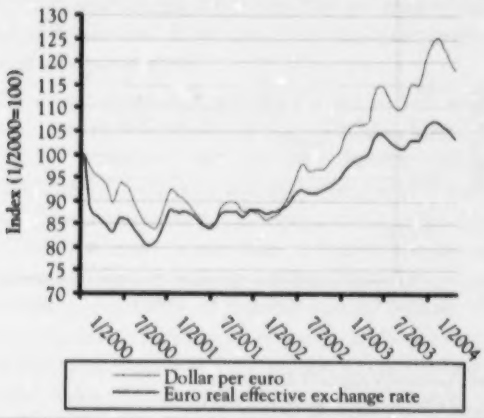
2 Figures for Turkmenistan should be treated with caution. In particular, the deflation procedures that are used to compute officially reported growth rates are not well documented and the reliability of these figures is questionable.

Sources: National statistics, CIS Statistical Committee; direct communications from national statistical offices to UNECE secretariat; reports by official forecasting agencies.

In Canada, economic activity in 2003 was temporarily affected by negative shocks, notably the spreading of SARS. The strong appreciation of the Canadian dollar against the US dollar, moreover, depressed merchandise exports. Annual growth of domestic demand was quite robust, but this was largely offset by adverse changes in real net exports. As a result, real GDP rose by only 1.7% in 2003, about half the growth rate of the preceding year.

GRAPH 3.1.2

Exchange rate of the euro, January 2000-April 2004

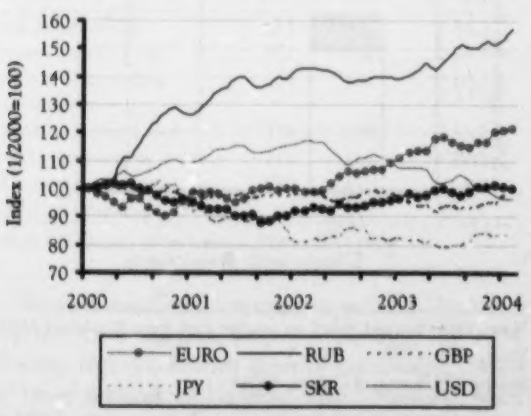


Note: Dollar per euro and real effective exchange rates are average monthly rates.

Source: European Central Bank, 2004.

GRAPH 3.1.3

Real effective exchange rates of selected currencies, 2000-2004



Notes: RUB is Russian ruble, GBP is British pound sterling, JPY is Japanese yen, SKR is Swedish krona and, USD is US dollar.

Source: IMF International Financial Statistics, 2004.

3.1.3 *The short-term economic outlook*

Annual world output growth is forecast to be some 4.5% in 2004, up from about 3.9% in 2003. The strong rise in output and demand will be accompanied by a marked acceleration in the volume growth of world merchandise trade to some 8%, twice the rate in 2003. The US and Asia will continue to be the major regional driving forces of world output growth. The euro area will continue to lag behind in the global cyclical recovery.

A major downside risk to the favourable global economic outlook are the persistent and large global current account imbalances, i.e. essentially the considerable US' current account deficit. There is, moreover, the risk of overheating in China, where a "hard landing" would have adverse economic implications beyond the Asian region. In Europe, a further strong appreciation of the euro could act as a brake on the nascent cyclical recovery. Another matter of concern is the unexpected surge in crude oil prices so far in 2004, which, if maintained at levels attained in May 2004, will raise inflation and dampen economic growth forces in the oil importing countries.

3.1.3.1 *North America*

In the US, real GDP expanded at an annual rate of 4.4% in the first quarter of 2004 driven by continued robust growth of personal consumption, investment spending and exports. Demand for labour has started to rise. These tendencies are seen to continue in the course of 2004, although some slowing in interest-sensitive expenditure items can be expected depending on the extent of increases in interest rates. Against this background, real GDP is currently forecast to increase by 4.6% this year.

In Canada, overall economic growth is expected to strengthen during 2004. Real GDP is forecast to increase by 2.6% in 2004.

3.1.3.2 *Western Europe*

In the euro area, the cyclical recovery continued in the first quarter of 2004, when real GDP rose by 0.6% compared with the preceding quarter. For the year as a whole, real GDP is forecast to increase by 1.6% compared with the preceding year. Exports will be the main engine of growth, assuming that there will not be a further strong effective appreciation of the euro. Economic activity is also supported by a turnaround in equipment and construction investment. Growth of private household consumption is expected to strengthen only moderately in view of only small gains in employment.

Outside the euro area, in the United Kingdom, economic activity remained strong in the first months of 2004, leading the central bank to further raise interest rates in order to meet its inflation target. Real GDP is

forecast to increase by 2.8% in 2004, largely reflecting the continued strength of private household consumption and government spending.

For the aggregate of western European countries, real GDP is forecast to increase by some 2% in 2004, about twice the rate achieved in the preceding year.

3.1.3.3 *Eastern Europe*

Economic growth in eastern Europe will strengthen further in 2004. Real GDP is expected to increase by 4.5%, up from 3.8% in the preceding year. This domestic demand will remain the major engine of growth, the combined effect of continued robust growth of private consumption and a marked strengthening of fixed investment. Also exports will be buoyant, spurred by the recovery in world trade and the cyclical upturn in western Europe. In the new EU Member States, the positive effects of EU accession on business and consumer sentiment, should also support spending behaviour of households and firms.

3.1.3.4 CIS

In the CIS, some moderation of growth is expected in 2004, with aggregate GDP forecast to increase by about 6%. This reflects expectations of a moderate slowdown in the region's largest economies (especially Russia), which, in turn, is mostly related to uncertainties surrounding the external environment. But growth expectations for Russia have been bolstered by the surge in oil prices. Economic performance in the non-oil sectors of the Russian economy will also depend on the rouble's exchange rate.

3.2 Construction sector developments[17]

This section presents short-term trends in construction in Europe and North America. Where information is available, the section focuses on new residential construction, plus the repair and remodelling market, because these sectors use the most wood.

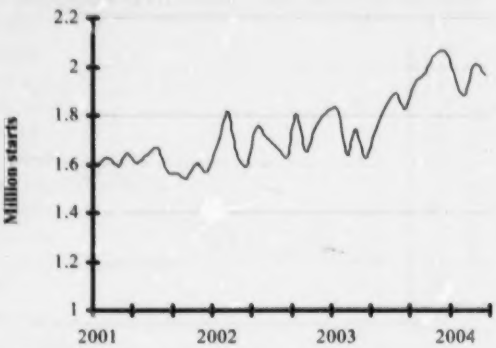
3.2.1 *Residential construction in North America*

3.2.1.1 *United States*

The US housing market recorded 1.9 million total starts in 2003 of which 1.5 million single family (graph 3.2.1). This was the best market since the 1970s for total starts, and the best ever for the important single-family category (graph 3.2.2). The lowest interest rates in over 40 years were a major driver, as well as favourable demographics supported by strong immigration. During the past five years, first and second generation immigrants purchased over one quarter of all new homes sold in the US.

GRAPH 3.2.1

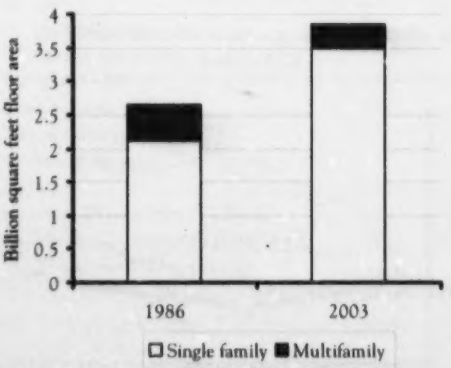
United States housing starts, 2001-2004



Note: Seasonally adjusted annual rate.
Source: US Bureau of the Census, 2004.

GRAPH 3.2.2

United States housing floor area, 1986 and 2003



Note: 1986 demand based on use per start from *Residential Market Study*, APA, 1988.
Source: US Bureau of Census, 2004.

[17] This construction section was written by Dr. Al Schuler, Research Economist, Northeast Forest Experiment Station, USDA Forest Service, Princeton, West Virginia, USA, and Mr. Craig Adair, Director, Market Research, APA–The Engineered Wood Association, Tacoma, Washington, USA (full contact information in chapter 10).

Housing represents almost 20% of US GDP and consumes 75% of structural wood building materials such as sawnwood and structural panels, specifically oriented strand board (OSB) and plywood. Therefore there is a direct link between housing construction and the wood products industry, as well as with the US economy.

The number of new housing starts gives only a partial picture of the demand for wood products. Consider these factors which increase wood consumption: (a) 80% of the starts have been single family over the past few years, and (b) houses today are one third larger than 20 years ago. Today's housing market is the best ever in terms of value of construction and floor area, and hence in terms of wood products consumed.

Other construction sectors did not fare as well as new housing. Repair and alteration increased 2.1% from 2002 to 2003. However, all of the growth was in "improvements" (additions and alterations) which was up 5.4%, while maintenance and repairs was actually down 7%. This is actually better than it sounds because the improvements category is by far the larger component representing about 75% of the remodelling market. The non-residential construction sector also could not match the stellar performance in new residential. According to "Annual Value of Construction Put in Place", residential value (including repair and remodelling) was up 10.3% from 2002 to 2003 while private non-residential sector actually fell 1.6% (table 3.2.1) (US Bureau of the Census, *Report* C50, 2004).

TABLE 3.2.1.

Value of installed US construction, 2002-2003

(billion US dollars)

	2002	2003	% change
Total construction	861	898	4.3
Private construction	651	682	4.8
Residential including improvements	428	472	10.3
Private non-residential	229	216	-5.7
Public construction	210	216	0.8
Total non-residential (public and private)	439	432	-1.6

Source: US Bureau of the Census, *Report* C50, 2004.

The non-residential construction sector in the US is expected to strengthen with the economy in 2004, following two consecutive years of contraction. Stores and other commercial buildings were "overbuilt" when the US economy was booming, and construction has not begun to pick up yet. The manufacturing sector turnaround is the main driver for commercial construction, but the sector currently suffers from a high vacancy rate caused by the recent poor economy.

3.2.1.2 *Canada*

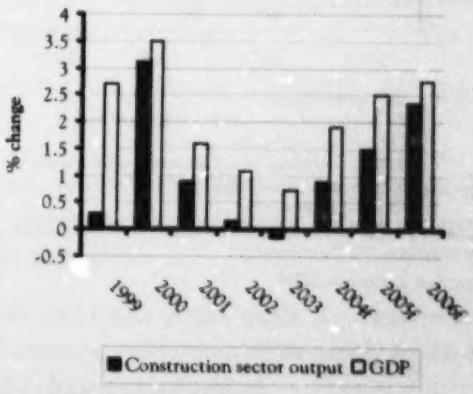
Canadian housing markets were also stellar performers in 2003 with starts up 6.3% over 2002. Starts in 2003 totalled 218,000, the best in over two decades. There were indications that the market was cooling slightly in 2004, with starts averaging an annual 210,000 in the first quarter, down 11% from the same period in 2003.

3.2.2 *European construction developments*[18]

Construction activity in Europe was performing poorly due to the slow growth in the overall economy. According to Euroconstruct, total construction sector output in 2003 in western Europe fell 0.2% from 2002. 2004 is expected to be somewhat better with construction output following GDP upward and growing 1% (graph 3.2.3). Eastern European markets show similar trends but with growth in both GDP and construction about double the western European numbers. Central European construction was being driven by positive economic growth in Poland and Hungary. For all 19 Euroconstruct countries[19], 2003 saw GDP growth of 0.8%, but construction sector dropped by 0.2%.

GRAPH 3.2.3

European GDP vs. construction sector output, 1999-2006



Note: f= forecast by Euroconstruct.

Source: Euroconstruct, 2004.

[18] Information for this section comes mainly from Euroconstruct, www.euroconstruct-budapest.com

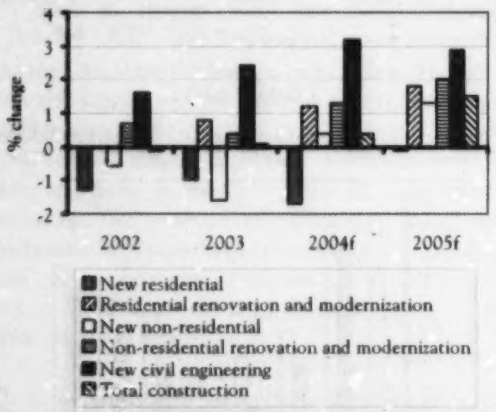
[19] Euroconstruct's 19 countries include 13 EU member states (Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Portugal Spain, Sweden, and the United Kingdom), plus Norway and Switzerland, and 4 CEECs (Czech Republic, Hungary, Slovakia and Poland). Note Euroconstruct's 15 western European countries are not the EU15. Note that Euroconstruct's analysis of central and eastern European construction is based on 4 countries.

In every year from 1999 to 2006, the construction sector output has grown slower than the economy as a whole. This must be taken into account in projecting long-term trends for consumption of forest products.

The problem over the past three years has been the weak housing sector, which represents about 45% of construction activity. High unemployment and weak disposable income growth are part of the problem, while budgetary problems in Germany, France and Italy are reducing housing subsidies. These problems are affecting new residential investment more than remodelling and maintenance (R&M) activity (graph 3.2.4). In western Europe, new residential activity fell 1.3% in 2002 and another 1% in 2003, while R&M activity was a bit better with zero growth in 2002 and 0.8% growth in 2003 (Euroconstruct Conference, Portugal, November 2003).

GRAPH 3.2.4

European construction sector developments, 1999-2005



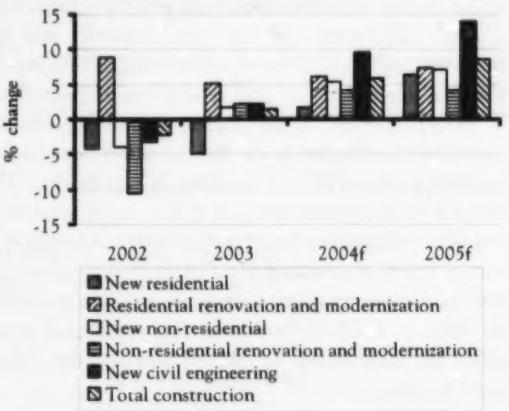
Note: f= forecast by Euroconstruct.

Source: Euroconstruct, 2004

Non-residential construction across the Euroconstruct countries saw a second consecutive year of recession in 2003 (-1.7%) although the forecast for 2004 through 2006 is for a modest improvement (0.4% in 2004 and 1.3% growth in 2005). Civil engineering infrastructure spending (new plus R&M) has been the best performing sector over the past several years with 1.3% growth in 2002 followed by 1.9% growth in 2003 and forecast growth of 3.3% in 2004 for western Europe. Eastern Europe has exhibited similar trends although the growth rates were slightly higher (graph 3.2.5).

GRAPH 3.2.5

Central and Eastern European construction sector's developments, 1999-2005



Note: f = forecast by Euroconstruct.

Source: Euroconstruct, 2004.

Chapter 4
Roundwood consumption increases with higher wood products production: Wood raw material markets, 2003-2004[20]

Highlights

- The total removals of roundwood in the UNECE region were close to record levels in 2003 as higher consumption of forest products increased the operating rates in the forest industry.
- The highest increase of roundwood removals, 2.4%, occurred in the EU/EFTA region, where Austria, France and Finland together harvested almost 3.8 million m^3 more in 2003 than in 2002.
- Exports of chips from rising sawmill residues from central and eastern European countries to EU/EFTA for rising pulp and wood-based energy production have doubled in three years.
- Russian industrial roundwood at almost 30% of the total harvest volume, continue to be an important supply source for the forest industry in both Asia and Europe.
- Roundwood consumption in North America was 4% lower than it was in 1999 due to declining exports of forest products.
- Sawlog prices fell in many markets when industrial roundwood supply increased more than demand; however, the exception was in the Baltic States and Poland, where higher sawnwood production pushed sawlog prices upward during 2003 and 2004.
- Higher prices, and therefore revenues, for many pulp and paper grades made it possible for the industry to pay more for its wood raw materials and ensure a stable wood fibre supply in the face of increasing competition and, hence, rising prices for chips and pulpwood.
- Wood energy promotion policies, such as favourable taxation and investment incentives by UNECE-region Governments, have resulted in higher consumption of fuelwood, as well as increased concerns about the impact these changes will have on pulp and panel manufacturers' raw materials.
- Forest products imported to the EU and manufactured from illegal logs in Asia and Africa have been forcing government agencies and industry organizations to outline initiatives and recommendations to curb such trade.

[20] By Håkan Ekström.

Secretariat introduction

We thank Mr. Håkan Ekström[21], President, Wood Resources International, for analysing the wood raw material markets in the UNECE region for the second year. Mr. Ekström's perspective and experience in the roundwood, chip and wood energy resource markets is the basis for this chapter. He is the Editor-in-Chief of *Wood Resource Quarterly* and the *North American Wood Fibre Review*, two publications that follow the wood fibre markets, including prices, in Europe, Asia Oceania and North and South America. Wood Resources International is a consulting firm with worldwide experience in wood raw materials markets. One of its current projects concerns the market effects of illegal logging worldwide. We also thank his contributors, including Ms. Eva Janssens, European Panel Federation (and lead author of the panels chapter), Mr. Bernard Lombard, Confederation of European Paper Industries, and Mr. Ralf Dümmer, Ernährungswirtschaft.

4.1 Introduction

The total removals in the UNECE region were 1.2 billion m^3 in 2003, of which 86% was for industrial purposes. Of the total wood consumed by the forest industry, 74% consisted of coniferous roundwood[22], which was used primarily by the sawmilling sector. The remaining 26% of wood utilized was of non-coniferous species, which went mainly to the pulp and paper industry.

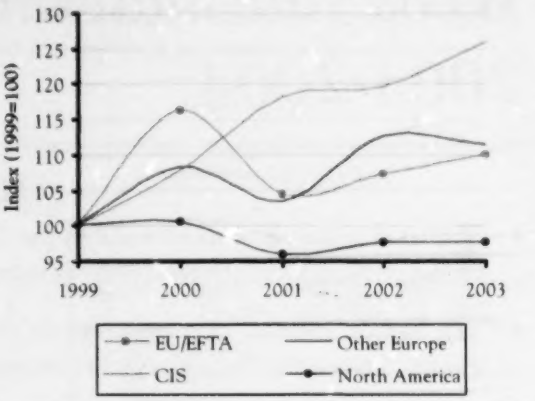
Roundwood removals in 2003 were higher than in 2002 in all four subregions. With the exception of the year 2000, the total consumption of roundwood has never been higher than in year 2003 (graphs 4.1.1 and 4.1.2). The severe windstorms in Europe in December 1999, which felled the equivalent of a year's harvest in two days, were the reason for the abnormally high fellings shown in the statistics for 2000.

4.2 EU/EFTA subregion

The demand for forest products in the EU/EFTA subregion was stronger in all sectors in 2003 compared with the previous year. The higher operating rates in the forest industry resulted in increased demand for wood raw material. After having declined the two previous years, removals of roundwood in EU/EFTA increased by 2.4 % to 283 million m^3 in 2003 (table 4.2.1). Four of the five largest roundwood-producing countries in Europe increased their harvest volumes, and demand was higher for both coniferous and non-coniferous timber.[23]

GRAPH 4.1.1

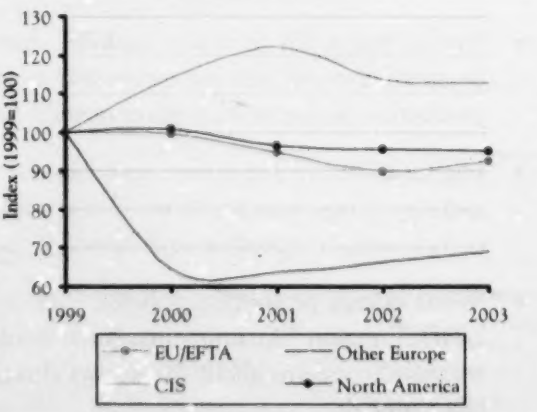
Consumption of softwood roundwood in the UNECE region, 1999-2003



Source: UNECE/FAO TIMBER database, 2004.

GRAPH 4.1.2

Consumption of hardwood roundwood in the UNECE region, 1999-2003



Source: UNECE/FAO TIMBER database, 2004.

[21] By Håkan Ekström, President and Editor-in-Chief, Wood Resources International, P.O. Box 1891, Bothell, Washington 98041, USA. Telephone +1 425 402 8809, Fax +1 425 402 0187, website: www.wri-ltd.com, email: hekstrom@wri-ltd.com.

[22] Roundwood components appear in the annex and definitions appear in the electronic annex.

[23] Detailed tables with full country statistics may be found in the electronic annex at: http://www.unece.org/trade/timber/docs/fpama/2004/fpamr2004.htm.

TABLE 4.2.1

Roundwood balance in EU/EFTA, 2002-2003

(1,000 m³)

	2002	2003	Change %
Removals	276 131	282 738	2.4
Imports	53 960	55 177	2.3
Exports	19 083	18 044	-5.4
Net trade	-34 877	-37 133	6.5
Apparent consumption	311 008	319 871	2.8

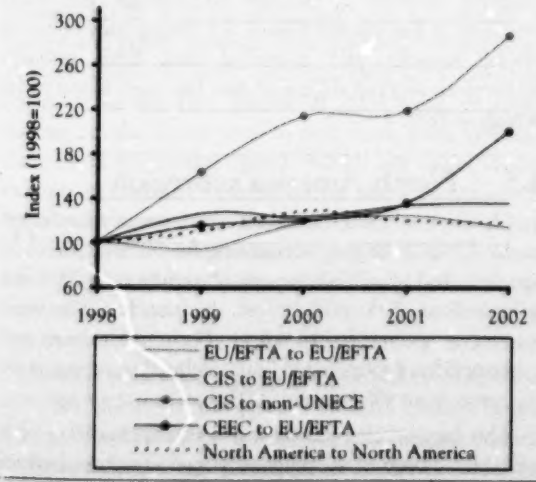
Source: UNECE/FAO TIMBER database, 2004.

Despite the increase in removals in the EU/EFTA region, coupled with lower sawlog prices, many sawmills and pulpmills increased their dependence on imported logs, which accounted for 18.3% of the total domestic consumption of industrial roundwood (graph 4.2.1). The increase in wood fibre consumption by the wood panel industry, and by the pulp and paper sector, was 3.4% and 4.6%, respectively, as compared with 2002.

The major trade flows of roundwood globally are within the EU/EFTA region, from Other Europe to EU/EFTA and from CIS to Europe and Asia. During the 1998-2002 period the exports from CIS to Europe and Asia (non-UNECE) more than doubled, as the domestic industrial capacity to process roundwood into higher-valued products in Russia was much lower than the available supply of sawlogs and pulplogs (graph 4.2.1).

GRAPH 4.2.1

Industrial roundwood trade flows in the UNECE region, 1998-2002



Note: Full trade flow table in the electronic annex.

Source: UN Comtrade/EFI, 2004.

The EU imported almost two million m³ of tropical hardwood roundwood in 2003. In addition to logs, the region also imported sawnwood, plywood, pulp, paper and other manufactured products, which some NGOs claim were from illegally harvested trees in Asia and Africa. In response to those allegations, the EU set up an Action Plan for Forest Law Enforcement, Governance and Trade (FLEGT) in 2003 to outline several initiatives including a plan to enter into voluntary bilateral agreements between the EU and partner countries. The plan includes increased monitoring and enforcement capacity, systems for tracking legal timber, a third-party verified export licensing system and, finally, options to restrict the import of illegal timber products.

Fuelwood removals were estimated to be approximately 12% of total removals, or 34 million m³ in 2003. The usage of roundwood for fuel has consistently increased over the past four years, due in part to rising fossil fuel prices (with oil prices in mid 2004 at near record highs). (Promotion by Governments, including the European Commission, is also stimulating the wood energy market through a series of measures, including favourable taxation and investment incentives. Roundwood usage for fuel was almost 11% higher in 2003, as compared with 2000. The use of sawmill residuals for energy purposes has also increased, posing a problem for the traditional users of wood chips, sawdust and shavings. The pulp industry and the wood-based panel industry are worried that an increased share of residues will be used for producing energy at subsidized costs and that this will impact both the available supply and the prices of their traditional supply sources. Instead, the manufacturing industry suggests that the energy sector should increase the use of forest waste and wood fibre from energy plantations.

4.3 Other Europe subregion

The roundwood removals grew to a record level of 135 million m³ in 2003 (table 4.3.1). Most of this growth was of fuelwood, while total removals of industrial wood for the entire region were practically unchanged from the previous year. However, the trends varied substantially within the region, with increases of harvest volumes by 5-10% in Poland, Slovakia and Slovenia, while removals were down 4% or more in Bosnia, Hungary, Romania and Turkey.

TABLE 4.3.1

Roundwood balance in Other Europe, 2002-2003

(1,000 m³)

	2002	2003	Change %
Removals	133 632	134 945	1.0
Imports	5 251	5 694	8.4
Exports	16 757	17 865	6.6
Net trade	11 505	12 171	5.8
Apparent consumption	122 127	122 774	0.5

Source: UNECE-FAO TIMBER database, 2004.

TABLE 4.4.1

Roundwood balance in the Russian Federation, 2002-2003

(1,000 m³)

	2002	2003	Change %
Removals	165 000	168 500	2.1
Imports	229	200	-12.7
Exports	37 770	37 730	-0.1
Net trade	37 541	37 530	0.0
Apparent consumption	127 459	130 970	2.8

Source: UNECE-FAO TIMBER database, 2004.

Chip exports from central and eastern European countries were up dramatically in 2003. In only three years, volumes have increased from 2.6 million m³ to 5.2 million m³. The major reason for this is the increased use of chips for energy purposes in the EU/EFTA. While biomass plants outside the CEECs consumed a small share of the export volumes, the majority was purchased by pulpmills. Pulp manufacturers in those export markets have experienced increased competition from domestic energy producers for raw material supplies and thus they have had to expand from their traditional domestic supply sources. The largest exporters in 2003 were Latvia, Estonia and the Czech Republic, together accounting for 70% of total chip exports from this region. The major destinations for the chips were pulpmills in Germany and Sweden and panel manufacturers in Italy.

Industrial roundwood exports were also at record levels in 2003, accounting for over 16% of the total removals of industrial roundwood. The major exporting countries were the Czech Republic (coniferous), Estonia (coniferous and non-coniferous) and Latvia (coniferous and non-coniferous).

The expanding forest industry sector in many of the countries that joined the EU in 2004 are expecting that trade in roundwood, chips and manufactured products will increase, with less paperwork at border crossings and more timely deliveries to customers within the EU.

4.4 CIS subregion

Foreign investments in the Russian forest industry have continued, and industry demand for roundwood has increased by 15% in the past five years. The total removals in 2003 were estimated to be 168 million m³, of which 133 million m³ was industrial roundwood (table 4.4.1). Despite the expanding domestic industry, Russia exports a large share, nearly 30%, of the total industrial roundwood removals. Few countries in the world export such a high percentage of their available wood supply.

A majority of the traded logs were exported from Siberia and the Russian Far East to markets in China, Japan and the Republic of Korea. In the western regions of Russia, logs were shipped mainly to sawmills and pulpmills in Sweden and Finland. More than 80% of raw material imports to Finland originate in Russia. Although the Russian supply of logs and chips is not as important to the Swedish forest industry as it is to Finland's, it is still the second largest supplier of raw material, accounting for 14% of total imports.

It should be noted that a number of NGOs, international as well as Russian, believe that in addition to the official harvests there is another 20-30% of "undocumented" timber harvested in both eastern and western Russia. Large amounts of the undocumented volumes are believed to be shipped via rail to a growing market in China. Research being undertaken by the author (as yet unpublished) indicates that export volumes from eastern Russia to China, as presented by the Customs Statistics Department in Moscow, are substantially lower than data compiled locally from a complete database of customs declarations. For some provinces in Far Eastern Russia, the discrepancy between official statistics and compiled data from customs declarations and rail shipment data has been found to be as high as 30%.

4.5 North America subregion

North America is the largest consumer of roundwood in the UNECE region, accounting for 52% of the total removals. Industrial roundwood consumption in 2003 was estimated at 591 million m³, of which 73% were coniferous species (table 4.5.1). Both production and consumption of roundwood have declined in recent years and were about 4% lower in 2003 than five years ago.

The biggest changes in log consumption over this period have been in the pulp and plywood sectors, both of which have suffered from increased foreign competition and from substitute products, i.e. recycled fibre and OSB, respectively. These developments have forced the industry to reduce capacity. As a result, these sectors are

using less roundwood than at the end of the 1990s while the sawmilling industry has stayed relatively healthy. The softwood sawmilling sector, particularly in western Canada, has even added capacity in recent years.

TABLE 4.5.1

Roundwood balance in North America, 2002-2003

(1,000 m³)

	2002	2003	Change %
Removals	642 532	642 786	0.0
Imports	11 337	9 218	-18.7
Exports	16 416	15 614	-4.9
Net trade	5 079	6 396	25.9
Apparent consumption	637 452	636 389	-0.2

Source: UNECE-FAO TIMBER database, 2004.

The border trade between the United States and Canada changed substantially in 2003. Log imports of coniferous and non-coniferous sawlogs declined in both countries and were down from a total of 11.3 million m³ in 2002 to 9.2 million m³ in 2003. Canadian sawmills reduced their reliance on US logs since they were running at lower operating rates in 2003 and domestic supply was slightly higher than the previous year. American sawmills, on the other hand, reduced their log sourcing from Canada because in 2003 the US dollar weakened against the Canadian dollar by as much as 12%. The decline resulted in higher delivered costs for Canadian sawlogs.

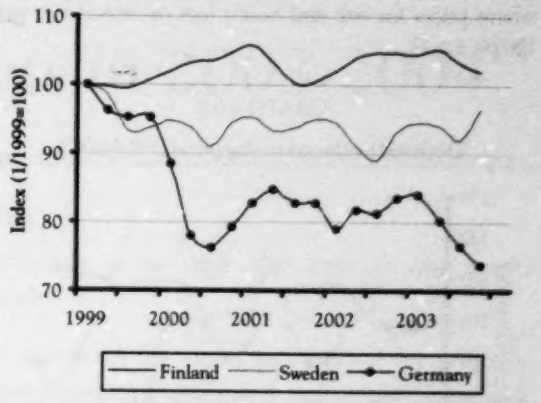
4.6 Raw material costs

Raw material costs, which typically account for between 60-70 % of the production costs for sawmills in Europe and North America, have generally trended down in local currencies during 2003 and early 2004. European log costs in the first quarter of 2004 were, in many markets, at the lowest level in over three years, although there were exceptions (graph 4.6.1). For example, log markets in Sweden, Poland, Latvia and Lithuania were tight and average prices have increased by 2-5% during 2003. Delivered sawlog costs during 2003 ranged between €35-55/m³ in Other Europe, €65-75/m³ in the Nordic countries and as high as €85-100/m³ in west central Europe (Germany, Austria and France).

Sawlog prices declined in parts of North America as well, particularly in the western US and Canada (graph 4.6.2). Wood prices came down despite high production levels and increasing market prices for sawnwood. The main reason for this somewhat surprising market response was that the supply of logs was higher than expected due to additional log volumes being harvested in areas of fires and beetle-infested forests.

GRAPH 4.6.1

Delivered softwood sawlog prices in Europe, 1999-2003

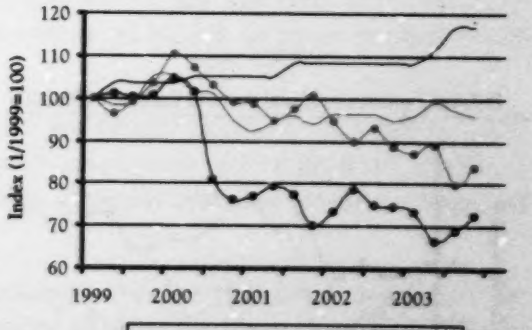


Note: Index based on delivered log price per m³ (under bark) in local currency.

Source: *Wood Resource Quarterly* (Wood Resources International), 2004.

GRAPH 4.6.2

Delivered softwood sawlog prices in North America, 1999-2003



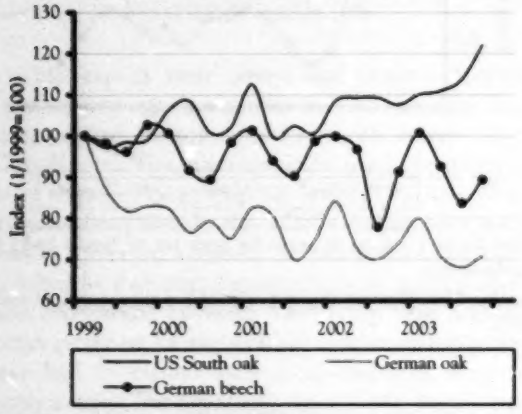
Note: Index based on delivered log price per m³ (under bark) in local currency.

Source: *Wood Resource Quarterly* (Wood Resources International), 2004.

Hardwood sawlog costs increased in the southern US, the principal market in North America. This increase was due mainly to short log supply. This was in contrast to prices for Germany, one of the major markets in Europe, where prices for oak and beech logs decreased last year (graph 4.6.3).

GRAPH 4.6.3

Delivered hardwood sawlog prices, 1999-2003

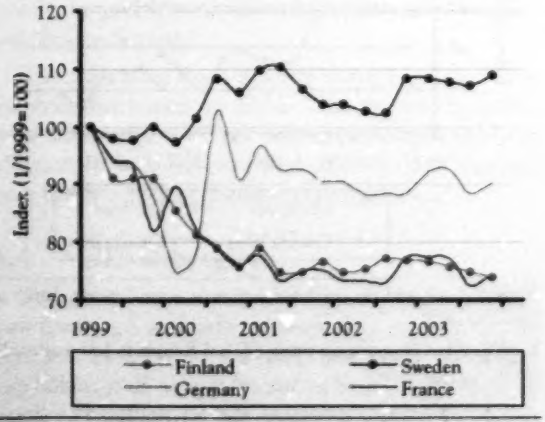


Note: Index based on delivered log price per m^3 (under bark) in local currency.

Source: US South: *Timber Mart-South* and Germany: ZMP, 2004.

GRAPH 4.6.4

Delivered softwood pulplog prices in Europe, 1999-2003

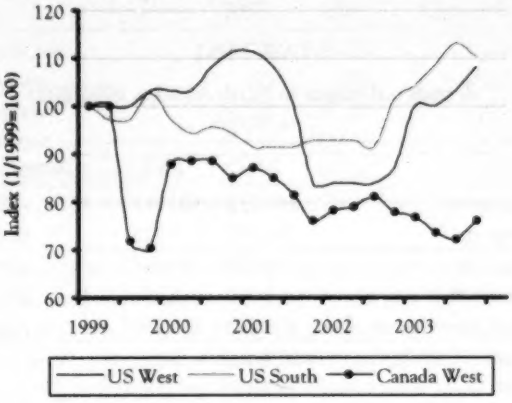


Note: Index based on delivered log price per oven-dry metric ton, in local currency.

Source: *Wood Resource Quarterly* (Wood Resources International), 2004.

GRAPH 4.6.5

Delivered softwood pulplog prices in North America, 1999-2003



Note: Index based on delivered log price per oven-dry metric tons, in local currency.

Source: *Wood Resource Quarterly* (Wood Resources International), 2004.

Wood fibre costs for the pulp industry in both North America and Europe were up in most markets in the latter half of 2003 and early 2004 (graphs 4.6.4 and 4.6.5). This change was due to a strengthening pulp and paper market. The benchmark pulp grade, Northern Bleached Softwood Kraft pulp (NBSK), increased from $440/ton in January of 2003 to as high as $640/ton in June of 2004.

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Zentrale Markt- und Preisberichtstelle für Erzeugnisse der Land-, Forst- und Ernährungswirtschaft (www.zmp.de)

Chapter 5
Riding the crest of the wave: Sawn softwood markets in 2003-2004[24]

Highlights

- Globalization of the sawn softwood sector continues as we ride the crest of the wave, characterized by generally positive markets worldwide.
- In North America, market conditions for sawn softwood are booming, fuelled by a robust housing sector; however, the ongoing trade dispute between the United States and Canada is dampening this generally positive outlook.
- The mountain pine beetle epidemic that rages in British Columbia, Canada continues, with approximately 4.8 million hectares of forestland currently infested and government policies regarding harvesting approaches being enacted as rapidly as possible.
- Demand for sawn softwood in the increasingly important Chinese market continues to grow, providing market opportunities for exporters of both sawnwood products and logs.
- Japanese sawn softwood consumption increased in 2003 for the first time since 1995 because of short-term increases in housing starts: European sawnwood exports to Japan reached record levels in 2003.
- Markets for sawn softwood in Europe remain strong and Nordic producers fared well in 2003, particularly Sweden, whose sawnwood output neared record levels of 17 million m^3, in spite of increased competition from Russia and the Baltic countries and due largely to increased marketing efforts in the United Kingdom.
- The eastern European countries and Russia continue to re-define the global marketplace for sawn softwood, as foreign investments in these regions all along the forestry supply chain ramp up their ability to compete worldwide.
- A United States government ban on CCA-treated sawnwood in residential applications goes into effect in 2004, leaving wood preservers to seek alternative wood preserving solutions.
- The outlook for sawn softwood markets in 2004 is being impacted by the interplay of lower housing demand, increased roundwood supplies and a weaker US dollar.
- Based on historical trends, it is possible that higher North American prices for sawn softwood could still prevail through the first quarter of 2005, followed by a return to more normal pricing.

[24] By Mr. Henry Spelter, Dr. Robert Kozak and Dr. Nikolai Burdin.

Secretariat introduction

We thank Mr. Henry Spelter,[25] Economist, USDA Forest Service, Dr. Robert Kozak,[26] Associate Professor, University of British Columbia and Dr. Nikolai Burdin, Director,[27] OAO NIPIEllesprom, Russia, for another thorough analysis of the sawn softwood markets in the UNECE region. They contributed to last year's UNECE/FAO *Forest Products Annual Market Analysis, 2002-2004*, as well as to previous *Reviews*.

5.1 Introduction

In 2003, this chapter focused on how globalization had impacted the production, consumption, and trade of sawn softwood. This incontrovertible trend towards an increasingly complex web of international players continues unabated in 2003 and 2004, as oversupply, fierce competitive pressures, and global currency rates remain the formative themes in shaping the import and export patterns of sawn softwood products.

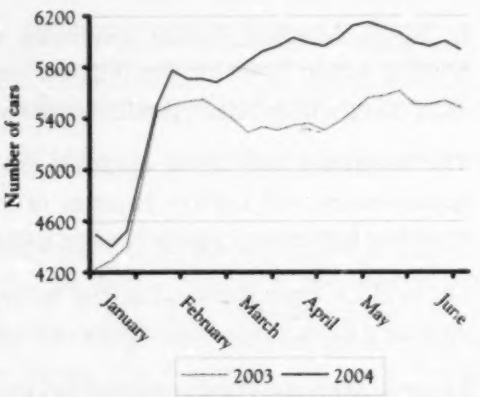
We characterize the global sawn softwood marketplace in 2003 and 2004 as one that is 'riding the crest of the wave'. Markets were generally positive in 2003, and growing demand for wood products resulting from robust housing activity in various parts of the world, e.g. North America and Japan, kept prices relatively buoyant in those markets. Some interesting trends, which have and undoubtedly will continue to influence the dynamics of the global sawn softwood marketplace, are outlined below.

In general, sawn softwood prices increased, especially in North American markets, as rising demand, coupled with a weakening US dollar, began to exhaust available capacity.

Sawn softwood markets in North America were strong in the first half of 2004, driven largely by a boom in home construction. Almost three years of low (and in real terms, negative) interest rates for short-term funds and, consequently, low cost mortgages, spurred activity in US single-family home construction, as well as in home repair and remodelling. On the supply side, 2004 shipments were hindered by the inability of railroads to provide enough cars to meet demand. Even with railcar loadings up 8% in the US (graph 5.1.1) and 6% in Canada, the available transport capacity was below needs. This delayed shipments and discouraged some production in both the US and Canada and raised shipping costs. Consequently, US imports of sawn softwood products (especially from European producers) reached an all time high in the first quarter of 2004, up 35% over the same period in 2003.[28]

GRAPH 5.1.1

Weekly railcar loadings of wood products by US railroads, 2003 and 2004



Note: Four-week moving average.

Source: American Association of Railroads, 2004.

Whilst non-tariff barriers of wood products exported from North America to Europe continue in the form of phytosanitary restrictions, it is the ongoing dispute over Canadian sawnwood exports into the US that has most affected international trade in sawn softwood. Despite various rulings by the World Trade Organization (WTO) and the North American Free Trade Association (NAFTA), stiff tariffs and other barriers are still in place. Further, the weakness of the US dollar, which fell from a high of CDN $1.60 in 2002 to as low as CDN $1.30 in early 2004, reduced returns for Canadian suppliers and dampened their incentive to sell to US markets. Initially, Canadian market share fell in the early months of 2003 until significantly higher prices restored their incentives (graph 5.1.2). By May 2004, prices for commodity sawnwood spruce-pine-fir from Canada, pine from the US south, and Douglas fir-hemlock from the US west neared historical highs, which spurred imports.

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[26] Dr. Robert Kozak, Associate Professor, Faculty of Forestry, University of British Columbia, 4th floor, Forest Sciences Centre, 4041-2424 Main Mall, Vancouver, British Columbia, Canada, V6T 1Z4, telephone +1 604 822 2402, fax +1 604 822 9104, e-mail: rob.kozak@ubc.ca.

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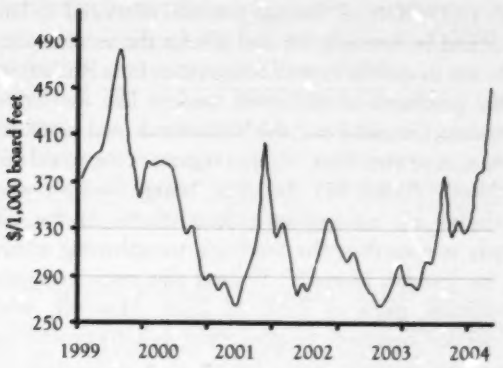
[28] US Offshore Lumber Imports Set Record in First Quarter. Random Lengths International, 37(12), 9 June 2004.

GRAPH 5.1.2

Weekly price index of structural lumber, 1999-2004



Source: Random Lengths Inc., 2004.

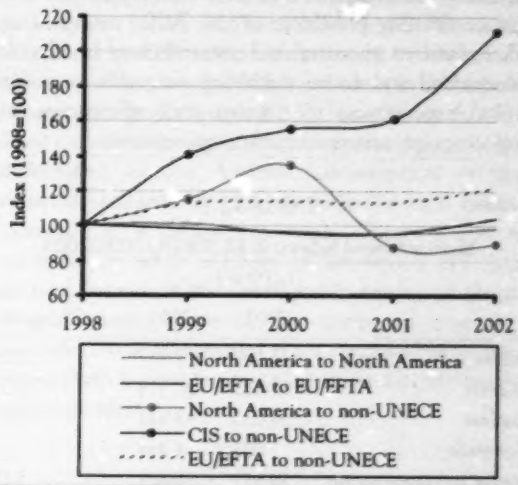
Lastly, it is worth noting trends in two key markets that, while not part of the UNECE region, continue to have significant impacts on production, consumption and exports of sawn softwood products – China and Japan. Unlike other importing regions of the world, China's demand for commodity sawn softwood products keeps rising rapidly (and is expected to continue), although consumption is still currently dominated by hardwoods. This provides increasing market opportunities for exporters of both sawn softwood products and raw logs to feed domestic production. In Japan, 2003 saw increases in the demand for sawn softwood for the first time since that country's economic bubble burst some 10 years ago. While the 2003 levels of almost 24 million m^3 of consumption are not anywhere near the levels of 36 million m^3 seen in 1995, they do represent a marked improvement over 2002. That said, this increase – attributed largely to higher rates of housing activity – are expected to slow down modestly in 2004.[29] Interestingly, this is not expected to have a significant impact on European exports of sawn softwood to Japan, which reached record levels of over 2.7 million m^3 in 2003.[30]

5.2 EU/EFTA subregion

In 2003, as in the past, much of the sawn softwood trade in Europe occurred within the continent. However, while trade in the EU/EFTA subregion is generally best described as being fairly dynamic, 2003 was characterized by a remarkable consistency, e.g. of trade flows (graph 5.2.1), as well as some optimism[31] despite fluctuations in sawn softwood prices (graph 5.2.2), global exchange rates and inventories.

GRAPH 5.2.1

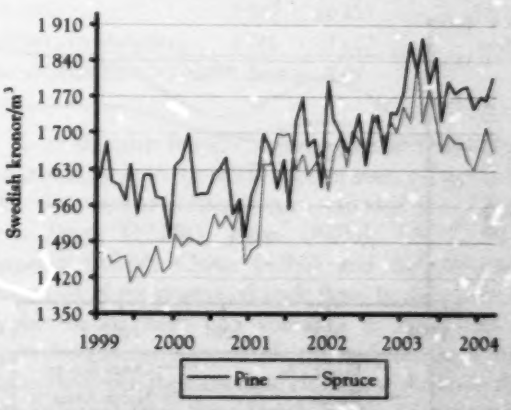
Sawn softwood trade flows in the UNECE region, 1998-2002



Note: Full trade flow table in the electronic annex.
Source: UN COMTRADE, EFI, 2004.

GRAPH 5.2.2

Sawn softwood export prices from Sweden, 1999-2004



Source: Swedish Wood Association, 2004.

[29] Global Lumber Outlook, 2004. Wood Markets Monthly, November 2003.

[30] Growing European Softwood Lumber in Japan. Japan Lumber Journal, 45(6), 31 March 2004.

[31] Upbeat Softwood Traders Look Back on Buoyant Year. TTJ, 20 December 2003.

In the EU/EFTA subregion, sawn softwood production increased by 2.2% in 2003 over 2002 and was more than matched by a 4.8% growth in apparent consumption rates (table 5.2.1 and graph 5.2.3). In addition, the value of exports gained nearly 18% over the same period, while export volumes remained steady in 2003. Western European companies are quickly beginning to realize that they must compete against lower cost commodity producers in the Baltic countries and other countries in central and eastern Europe by adopting value-added and niche marketing strategies, increasing capital expenditures to improve mill efficiencies, and exploring new, untapped market opportunities.[32]

TABLE 5 2.1

Sawn softwood balance in EU/EFTA, 2002-2003

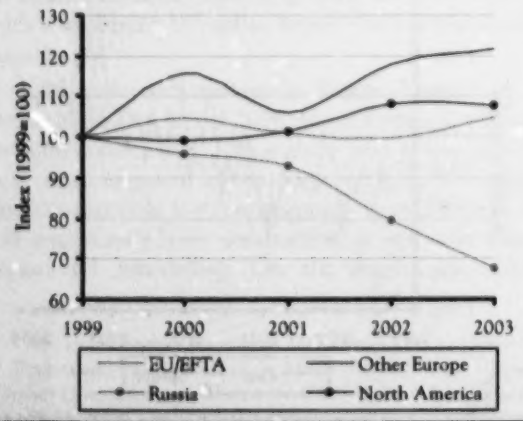
(1,000 m³)

	2002	2003	Change %
Production	75 480	77 167	2.2
Imports	33 482	35 374	5.7
Exports	34 085	33 941	-0.4
Net trade	603	-1 434	...
Apparent consumption	74 877	78 601	5.0

Source: UNECE/FAO TIMBER database, 2004

GRAPH 5.2.3

Apparent consumption of sawn softwood in the UNECE region, 1999-2003



Source: UNECE/FAO TIMBER database, 2004

In particular, Nordic producers have witnessed a banner year. Production of sawn softwood in Sweden was up 3.9% in 2003, nearing record levels of 17 million m³, with profitability of Swedish sawmills estimated to have increased by between 3% and 4% for the second year.[33] This was in spite of intense competition from Russian and Baltic producers in traditional markets like the United Kingdom, Germany and the Netherlands, and significant erosion of market share in other regions of the world such as North Africa. For the time being, Swedish wood producers are concentrating their efforts on the UK, largely as a result of the Sterling's strengthening relative to the Swedish krona.[34,35] Finland also made impressive production gains of 2.7% in 2003. However, while production continues to grow, forest industry profitability is on the decline, owing largely to a sector-wide 7% average drop in prices. Market forecasters should also take note of Finland's investments abroad – totaling 1.5 billion euros – directed for the most part at building new, large-scale sawmills in neighbouring Russia. In addition, a new railway line between Russia and Finland will likely have a significant impact on the wood supply situation, as Russian forests become even more accessible.[36]

5.3 Other Europe subregion

Consumption of sawn softwood products in the Other Europe subregion continues to move upwards, hitting a record high of almost 14.5 million m³ in 2003 (+3.1% over 2002) (table 5.3.1). Production of sawn softwood in 2003 increased by 4.8% overall in spite of negative to marginal growth by the top three producers, the Czech Republic, Latvia and Turkey (in order of decreasing production). Interestingly, the fourth largest producer in this subregion, Poland, has gone from production decreases of 6.0% in 2002 to production increases of 4.9% in 2003, although they are still well below their pre-2001 levels. Export levels of sawn softwood from the central and eastern European countries, which have been relatively consistent over the past five years, grew substantially by 8.9% in 2003 (mostly trade to the EU15). The most impressive gains were seen in the two largest exporting nations, Latvia (+13.9%) and Romania (+26.3%), in part benefiting from government policies to liberalize foreign investment.

[32] Global Lumber Outlook, 2004. Wood Markets Monthly, November 2003.

[33] Production Hits New Record. TTJ, 17 January 2004.

[34] Eastern European Exports Impact on Sweden's Markets. TTJ, 10 April 2004.

[35] Swedish Shippers Increase Focus on UK Market. TTJ, 13 March 2004.

[36] Production Rises but Prices and Profitability Stumble. TTJ, 22 May 2004.

TABLE 5.3.1

Sawn softwood balance in Other Europe, 2002-2003

(1,000 m³)

	2002	2003	Change %
Production	19 335	20 264	4.8
Imports	3 813	4 120	8.1
Exports	9 087	9 895	8.9
Net trade	5 275	5 775	9.5
Apparent consumption	14 060	14 489	3.1

Source: UNECE/FAO TIMBER database, 2004

In general, industry performance in the central and eastern European subregion is buoyant, thanks largely to decent infrastructures, plentiful timber supplies being harvested in increasing volumes, proximity to markets (with most of the exports being sold into the EU), and relatively stable political and economic climates. In the Baltics, production continues to be more concentrated and consolidated as a result of increased foreign investment, expanded capacities and modernized mills, especially in Estonia and Latvia. Fuelled by this positive climate, sawnwood capacities in the Baltics now sit at an all time high of approximately 7 million m³.[37,38]

In addition to the Baltics, increased investments are also prevalent in other central and eastern European countries,[39] which also continue to benefit from lower labour rates, liberal trade restrictions and accession to the EU. In short, countries in the Other Europe subregion are fast becoming formidable competitors in the sawn softwood arena. In particular, Sweden and Finland are feeling competitive pressures from producers in these regions, as some of their traditional export markets begin to source more and more wood products from eastern Europe.[40]

5.4 CIS subregion

In 2003, the total output of sawn softwood produced in the CIS region was up by 5.2% over the previous year, totalling over 20 million m³ for the first time since 2000. Of this total volume, Russia accounted for over 17 million m³ (table 5.4.1). This impressive production continues unabated due to the relative value of the rouble compared to other world currencies, stable demand from key importers, and increased foreign investments in forestry and sawmilling infrastructures. While comparatively small, volume outputs from Belarus and Ukraine are also on the rise, both with impressive double-digit gains in exports (+34.0% and +19.2%, respectively).

Russian exports continued to rise strongly in 2003, by over 18%, reaching more than 10 million m³. This increase comes at the expense of an 11-year downward slide in apparent domestic consumption. Russian consumption fell by 14.6% in 2003 over 2002, and has plummeted by 81% since the maximum in 1992 of 37.8 million m³. The remarkable fall is evident in the apparent consumption graph (graph 5.2.3). However, it should be noted that Russian apparent consumption figures may be understated, as the domestic consumption of sawn softwood produced by small sawmills for local markets' consumption is difficult to track. There is also the possibility of some volumes of sawnwood not being reported because of the questionable legality of the raw material source. However, this downward trend is in contradiction to the general rise in standard of living in Russia; there is a need to more closely investigate the data quality question.

TABLE 5.4.1

Sawn softwood balance in the Russian Federation, 2002-2003

(1,000 m³)

	2002	2003	Change %
Production	16 931	17 282	2.1
Imports	10	5	-50.0
Exports	8 600	10 160	18.1
Net trade	8 590	10 155	18.2
Apparent consumption	8 341	7 127	-14.6

Source: UNECE/FAO TIMBER database, 2004

As in the past, Russia continues to play a dominant and growing role in the world trade of sawn softwood. In 2003, the major importers of sawn softwood from Russia were: Egypt (12.0%), Japan (8.0%), UK (7.2%), Germany (5.2%), China (4.8%) and Italy (4.4%). Among all of the sawnwood trade flows in the UNECE region, exports from CIS countries to non-UNECE region destinations, for example the mideast, Japan and China, have seen the most rapid changes, as shown in the sawn softwood trade flows (graph 5.2.1). According to preliminary forecasts, this surge in production and exports is expected to continue into 2004.

[37] Global Lumber Outlook, 2004. Wood Markets Monthly, November 2003.

[38] On Into Europe. TTJ, 29 May and 5 June 2004.

[39] Global Lumber Outlook, 2004. Wood Markets Monthly, November 2003.

[40] Eastern European Exports Impact on Sweden's Markets. TTJ, 10 April 2004.

5.5 North America subregion

Overall, both production and consumption of sawn softwood in North America decreased marginally in 2003 (-0.5% and -0.6%, respectively) (table 5.5.1). Modest increases in production were observed in the US (+0.5%), while Canada saw a net reduction (-1.5%). That said, the volume of sawn softwood exports from the US decreased by 1.0% over 2002, while Canadian exports continue to grow (+1.7% in 2003). This implies that it was mainly production from North American manufacturers that met the increased demand in the US in 2003. Other offshore imports fell by 3%, reflecting the weakness of the US dollar. A strong Canadian dollar also hampered Canadian exports in the first quarter of 2003, but these strengthened as prices rose in the latter part of the year.

Looking ahead, the US economy is in the upward phase of a business cycle. With the current revival of previously lagging sectors (e.g. non-residential construction and manufacturing), inflation pressures are also increasing. Currently, the extraordinarily low interest rate environment is ending, as the US Federal Reserve began to raise lending rates in June 2004. Accordingly, the prospects for home construction are also beginning to change.

The boom in housing that low interest rates have helped has led to a dramatic 37% increase in home prices since 1997 (26% when adjusted for inflation), leading some analysts to speculate that a housing-price bubble has been created that is vulnerable to collapse. A review of home prices shows that they are at a 14-year high in relation to wages, but, because of the extraordinarily low mortgage rates, mortgage payments on these prices have actually been quite affordable. The outlook for housing and its vulnerability to a price collapse depends, in large measure, on the upward path of interest rates, but this appears unlikely in the framework of the current cycle. Rather, historic evidence points to interest rates rising gradually, causing housing starts to weaken only modestly (as discussed in chapter 3).

TABLE 5.5.1

Sawn softwood balance in North America, 2002-2003

(1,000 m^3)

	2002	2003	Change %
Production	117 663	117 081	-0.5
Imports	36 059	36 497	1.2
Exports	37 607	38 201	1.6
Net trade	1 548	1 704	10.0
Apparent consumption	116 115	115 378	-0.6

Source: UNECE/FAO TIMBER database, 2004

Two other occurrences in the North American sawn softwood marketplace that will have far reaching impacts are worth noting. First, a US ban on chromated copper arsenate preservative (CCA) in sawnwood for residential applications went into effect at the end of 2003. The available alternatives, mainly copper-based solutions, pose new challenges to US wood treaters with respect to meeting the demand for durable wood that does not corrode metal fasteners during the active service lives of the products in place.[41]

Second, in the major Canadian sawn softwood producing province of British Columbia, the mountain pine beetle problem has reached epidemic proportions. Estimates for 2003 put the area of coniferous forests that have been infested at an astounding 4.2 million hectares (from 165,000 hectares in 1999).[42] Unquestionably, this will have a profound impact over time on the economic well-being of forest-dependent communities across British Columbia. On a global level, this epidemic will no doubt impact on the dynamics of sawn softwood production, trade and consumption, as the provincial and federal governments work quickly to develop and enact policies regarding the appropriate harvest levels and companies explore market opportunities for the high volumes of beetle-killed wood coming on stream.

5.6 Outlook for 2004 and 2005

The short-term outlook for sawn softwood production, consumption and trade will be affected by three main factors: global exchange rates, sawn softwood prices and the ongoing trade dispute between the US and Canada. The course of exchange rates hinges largely on the US dollar, which has been weak because of the large current account deficits and low interest rates. A weaker US dollar hinders imports, which, in turn, bolsters domestic prices. In the meantime, a strong euro in early 2004 was already expected to slow US imports of whitewood (spruce and fir) from northern Europe, but the ensuing price boom offset its negative effects and European exports to the US in the first four months of 2004 actually recovered by 39% after falling off in 2003.

The second element affecting the outlook of sawn softwood dynamics is the supply response to the highly favourable prices experienced since the second half of 2003. Preliminary surveys indicate that US mills have increased capacity by 4% relative to 2002.[43] Planned

[41] Environmental Issues and Protection. The Forest Products Conservation and Recycling Review, USDA Forest Service, 16(5/6), May/June, 2004.

[42] British Columbia Ministry of Forests (2004). Mountain Pine Beetle Action Plan Update, 2004 (www.for.gov.bc.ca).

[43] Timber Processing, July/August 2004 issue. Hatton Brown publishers, Birmingham, Alabama.

capacity additions in Canada and Europe for several new or expanded mills suggest that similar increases are also taking place in those regions.[44] With the eventual rebalancing of railroad capacity in the US, supply flow increases are likely to follow. Based on past experience, they could exceed demand and upend the current upbeat prices. The interplay of possibly lower housing demand and increased supply on the one hand, versus a weaker dollar discouraging imports on the other, will set the stage for market forces in 2004 and 2005. Higher prices could still prevail through the first quarter of 2005, followed thereafter by a return to more normal pricing.

The final unresolved issue clouding sawn softwood markets concerns the US-Canada trade dispute. Although the general flow of decisions has been favouring the Canadian view and a possible ruling later this year could abolish all tariffs, inevitable appeals would delay its implementation until 2005 at the earliest. This means that Canadian companies will have to continue to operate under the uncertainty of the appeals process.

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US Offshore Lumber Imports Set Record in First Quarter. Random Lengths International, 37(12), 9 June 2004.

[44] Madison's Canadian Lumber Reporter, 25 June 2004.

Chapter 6
Sawn hardwood markets show signs of recovery in 2003 and 2004[45]

Highlights

- Sawn hardwood production in the UNECE region rose during 2003 due to increased domestic demand in the United States, a result of a buoyant construction sector and higher demand in central and eastern Europe for secondary processing.
- Apparent consumption of sawn hardwood in the UNECE region increased in 2003: both production and imports increased, while exports fell, due to a weakening in demand from Asian markets.
- After three consecutive years of decline, with much of the production moving to central and eastern Europe, production of sawn hardwood in the EU/EFTA subregion stabilized in 2003.
- Due to stabilization of the economic situation, as well as increased imports and decreased exports, apparent consumption of sawn hardwoods in the EU/EFTA subregion increased by 9.1% in 2003 compared with 2002, taking it back towards the peak level of 2000.
- EU production and consumption of hardwood flooring rose once again in 2003, having levelled off in 2002, mainly due to optimism about the future economic situation in Europe.
- Production, trade and consumption of sawn hardwood all grew in central and eastern Europe, driven predominantly by Romania, Turkey and the Baltic countries.
- CIS subregion production and consumption of sawn hardwoods are forecast to continue to rise slowly but steadily, as investment, infrastructure and general economic conditions improve.
- US production of sawn hardwood increased in 2003, driven by domestic demand and increased demand for exports to the EU/EFTA subregion.
- North American sawn hardwood prices rose significantly in 2003 and remained firm through the first half of 2004 as supplies struggled to meet demand.

[45] By Mr. Roderick Wiles.

Secretariat introduction

For this analysis of the sawn hardwood markets we would like to thank Mr. Roderick Wiles[46], Forest Industry Consultant, Broadleaf Consulting (formerly with the American Hardwood Export Council (AHEC)). Mr. Rupert Oliver, Editor, hardwoodmarkets.com also contributed to the chapter. We sincerely appreciate the financial support for this chapter, which was made available by Mr. David Venables, European Director, AHEC, who was also a contributor. Finally, we extend our thanks to Mr. Filip de Jaeger, Secretary General, CEI-Bois and European Federation of the Parquet Industry, who was also a key contributor.

6.1 Introduction

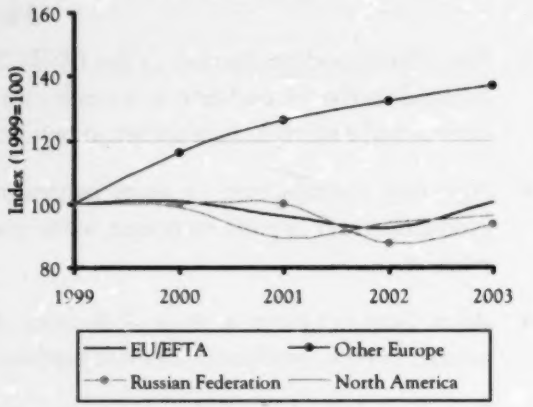
In terms of UNECE region sawn hardwood trade flows, exports from North America to Europe have seen a marginal increase in recent years, while exports from North America to non-UNECE countries such as China have not increased. Production of sawn hardwood in the UNECE region increased by 0.9% to just over 45 million m^3 in 2003, compared with the previous year. In October 2003, the Timber Committee forecast an increase of about 6% for 2004, an assessment confirmed by market impressions for the first six months of the year. Consumption of sawn hardwood in the region also increased in 2003, compared with the previous year, rising to just under 47 million m^3, a gain of 3.3%. Although this figure still remains below previous peaks, consumption grew in all UNECE subregions during 2003 (graph 6.1.1).

6.2 EU/EFTA subregion

Reports from sawmillers and importers suggest that demand for sawn hardwoods in the EU/EFTA subregion was weak through 2003 and the early part of 2004, but that it has not weakened as significantly as in previous years. Statistics indicate that production of sawn hardwood remained more or less unchanged for the subregion in 2003, after three years of consecutive reductions.[47] Furthermore, the same statistics show that imports of sawn hardwood increased. There is evidence of increased imports from eastern Europe for western European processing to supply the strong demand for oak. In addition, Belgian imports nearly doubled from 2002 to 2003, while there were also increases in imports for Denmark, the Netherlands, Spain and the United Kingdom (UK). At the same time exports decreased, resulting in a 9.1% rise in apparent consumption[4] (table 6.2.1).

GRAPH 6.1.1

Consumption of sawn hardwood in the UNECE region, 1999-2003



Source: UNECE/FAO TIMBER database, 2004.

TABLE 6.2.1

Sawn hardwood balance in EU/EFTA, 2002-2003

(1,000 m^3)

	2002	2003	Change %
Production	6 839	6 839	0.0
Imports	7 440	8 015	7.7
Exports	2 958	2 507	-15.2
Net trade	-4 482	-5 508	...
Apparent consumption	11 321	12 347	9.1

Source: UNECE/FAO TIMBER database, 2004.

The apparent conflict in the production statistics from those involved in the trade would seem to suggest that the sawmillers and importers have not yet felt the effects of this stabilization. In addition, years of market depression may have caused a certain amount of pessimism in the marketplace. Despite the ailing

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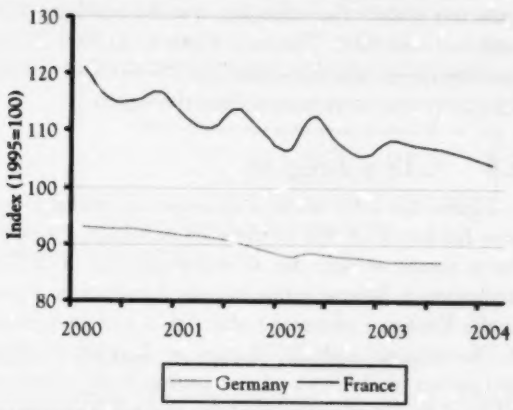
[47] See electronic annex for tables of individual country statistics at: www.unece.org/trade/timber/docs/fp-em/2004/fpamr2004.htm.

[4] It is important to note that sawn hardwood import statistics reported by EU/EFTA countries include some tropical species, resulting in higher than expected increases. The EU/EFTA tropical sawn hardwood imports increased by 4% in volume in 2003 and by 17% in value. In 2003, the EU/EFTA subregion's tropical sawnwood imports at 2.6 million m^3 were 32% of total sawn hardwood imports of 8.0 million m^3.

European beech market and the weakening of prices due to over production (graph 6.2.1), demand for sawn oak has increased across western Europe over the last 18 months. Market commentators suggest that overall demand for sawn hardwood in the region, including tropical species, is likely to remain stable, if not increase, in the near future. Anecdotally, so far in 2004, an atmosphere of cautious optimism has prevailed amongst European producers and importers.

GRAPH 6.2.1

German and French beech sawnwood prices, 2000-2004

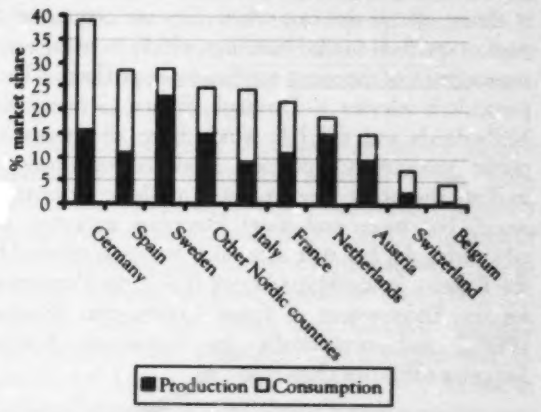


Sources: Statistisches Bundesamt Preise and Centre d'Etudes de l'Economie du Bois, 2004.

In contrast to the downward trends in 2001 and 2002, the hardwood flooring sector recovered its growth trend in 2003. The latest statistics available from the European Federation of the Parquet Industry (FEP) suggest that production amongst traditional member countries[48] (i.e. not including four EU accession countries) rose by 5.6% to reach an all-time high of 65.8 million m^2. If the new members of the FEP are taken into account, production in 2003 increased to 81 million m^2, representing the same year on year increase of 5.6% FEP has always maintained that the health of the parquet sector is closely linked to the construction market. However, overall economic performance and, therefore, construction, has been slow in Europe through 2003 (see chapter 3) and the growth in hardwood flooring production has actually been fuelled by confidence in the future of the market, as well as by growth in the remodelling market. Hardwood flooring has generally been increasing its share of the European flooring market in recent years and, in 2003, attained a 5.3% share. Increased production has been brought about by new production lines and increased capacities in existing plants in Austria, Spain and Sweden, as well as in Poland (although Polish production is not included in the figure for FEP production by traditional member countries quoted above).

GRAPH 6.2.2

Flooring production and consumption market shares in the European Federation of the Parquet Industry member countries, 2003



Notes: Approximately 99% hardwood, 1% softwood. Other Nordic countries are Denmark, Finland and Norway.

Sources: European Federation of the Parquet Industry (FEP), 2004.

Increased consumption of hardwood flooring has been met primarily by increased overall production within the FEP member countries, with consumption in 2003 reaching 84.2 million m^2, a rise of 4.6% over the previous year. The apparent shortfall in production to meet consumption within the FEP member countries comes from imports of hardwood flooring from non-FEP member producer countries, such as Croatia. Despite the Europe-wide increase in consumption, Germany's consumption of hardwood flooring fell once again in 2003, in accordance with weak economic conditions, from 25% to 23% of the market share, while increases were seen in France, Italy and Spain (graph 6.2.2).

The FEP also reports that the preference for oak seen in 2001 and 2002 continued in 2003, accounting for 47.5% of all parquet flooring production, while beech just managed to hold its position as the number two species. As a continuation of a trend reported last year, interest in darker, tropical species for hardwood flooring has increased. In 2003, tropical species accounted for 17.2% of production, up from 16% in 2002. This increase has been mainly at the expense of beech. Forecasts suggest that tropical species will be second only to oak in 2004.

[48] FEP "traditional" members are Austria, Belgium, Denmark, Finland, France, Germany, Italy, the Netherlands, Norway, Spain, Sweden and Switzerland. The FEP now also includes the Czech Republic, Hungary, Poland and Romania.

Commensurate with the change in fashion to darker woods, the use of maple dropped to 5.8% from 6.5% in 2002 and there was a marginal interest in ash.

Market commentators report that in 2003 and the first half of 2004 a further gearing up of interest in certified hardwoods has been witnessed in several, mainly northern, European markets, as well as in Spain. While it is not always easy to find third-party certified hardwoods, those who offer them are able to sell all that they can supply and more. Furniture manufacturers still show little interest in certified hardwoods, but the architectural and joinery sectors are increasingly asking for certificates. This is almost always the case when they are contracted to work on publicly-funded buildings, which, in many cases, require proof of the use of certified forest products. This is particularly relevant in Denmark, France, Germany, the Netherlands and the UK which have all announced public procurement policies. Evidence continues to indicate that there is no premium available for certified wood, but more and more European importers are advertising the fact that they stock materials certified by the Forestry Stewardship Council (FSC), the Programme for the Endorsement of Forest Certification Schemes (PEFC) and, occasionally, the Sustainable Forestry Initiative (SFI) (see chapter 9).

6.3 Other Europe subregion

Production of sawn hardwood in other European countries rose again in 2003 by 4.2% to around 8.7 million m^3 (table 6.3.1). Once again, continued growth in Romania's forest products sector drove this increase, while significant production increases in both Turkey and Latvia contributed to the overall growth.

TABLE 6.3.1

Sawn hardwood balance in Other Europe, 2002-2003

(1,000 m^3)

	2002	2003	Change %
Production	8 323	8 672	4.2
Imports	989	1 033	4.4
Exports	3 202	3 373	5.4
Net trade	2 213	2 340	5.7
Apparent consumption	6 110	6 332	3.6

Source: UNECE/FAO TIMBER database, 2004.

While Romania has been focusing on investment (partly foreign) within its domestic forest products sector and improving the quality of its sawn hardwood production, Latvia, Lithuania and Estonia have all increased production and exports of sawn hardwood. Slovakia has begun to supply Poland with hardwood logs and sawnwood in order to supplement what is available from the domestic resource and both Croatia and Yugoslavia have stepped up exports. Turkey, which for many years has suffered from a lack of investment and management in the forest products sector, is now showing signs of becoming a major player in the future supply of sawn hardwood. Apparent consumption of sawn hardwood within the subregion rose by 3.6% in 2003, compared with 2002. The pace of growth in 2003 did not equal the consumption increase of 6.2% reported in 2002, due mainly to a rise in exports from the region.

6.4 CIS subregion

Figures for 2003 show a decrease in production of sawn hardwood of 9% in the CIS subregion. However, this is almost entirely due to a dramatic fall of 66% in production in Belarus, while estimated production figures for the Russian Federation (table 6.4.1) and for Ukraine (6.5% compared with 2002) show an increase. Accurate data are not available for other countries in the subregion, but market commentators predict a slight, but continuing increase in production, exports and consumption in the Russian Federation for the foreseeable future. This is partly due to Chinese and other Asian furniture manufacturers, who are turning increasingly towards more competitive suppliers of hardwood, such as Russia and tropical countries, as shown by the rapid growth in exports from Russia to non-UNECE countries (graph 6.4.1). Russia's production of sawn hardwood at 2.4 million m^3 is only 15% of its 16.1 million m^3 production of sawn softwood.

TABLE 6.4.1

Sawn hardwood balance in the Russian Federation, 2002-2003

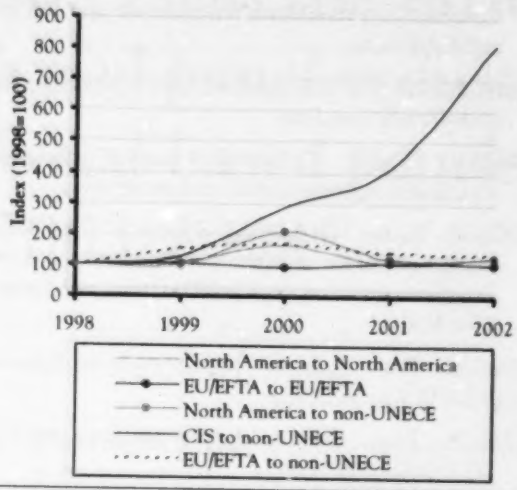
(1,000 m^3)

	2002	2003	Change %
Production	2 309	2 357	2.1
Imports	6	6	0.0
Exports	420	340	-19.0
Net trade	414	334	-24.0
Apparent consumption	1 895	2 023	6.8

Source: UNECE/FAO TIMBER database, 2004.

GRAPH 6.4.1

Sawn hardwood trade flows in the UNECE region, 1998-2002



Note: Full trade flow table in the electronic annex.
Source: UN Comtrade/EFI, 2004.

6.5 North America subregion

Production of sawn hardwood in North America edged towards the peak of 1999, as it increased by 0.2% in 2003 compared with 2002, reaching a total of 29.5 million m^3 (table 6.5.1). Furthermore, this growth was entirely accounted for by production increases in the US as Canadian production of sawn hardwood actually decreased by 4.4%. In 2002, Canada accounted for around 6% of all North American sawn hardwood production, while in 2003 this proportion fell to around 5.5%.

TABLE 6.5.1

Sawn hardwood balance in North America, 2002-2003

(1,000 m^3)

	2002	2003	Change %
Production	29 461	29 507	0.2
Imports	2 842	3 073	8.1
Exports	4 270	4 291	0.5
Net trade	1 428	1 218	-0.5
Apparent consumption	28 033	28 289	0.9

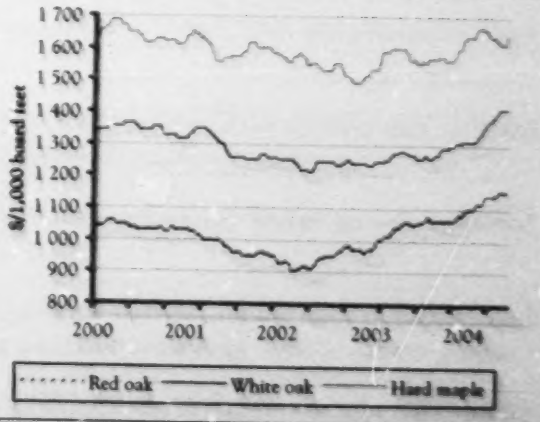
Source: UNECE/FAO TIMBER database, 2004.

Following bad weather in the winter of 2002-2003 and more rain than expected through the end of 2003 and into the spring of 2004, the US production of sawn hardwood has been severely hampered by difficulties in obtaining logs. Although this situation has begun to ease during the first half of 2004, certain species – notably white oak – have been difficult to obtain. Increased demand for oak in Europe – the largest export market for US sawn hardwood – has put added pressure on this restricted supply line and the result has been that US exporters have found themselves in a seller's market. Increased demand has lead to a firming in prices, not only in white oak, but across the range of species (graph 6.1.5). In addition, the US construction sector has been buoyant and demand from within the domestic market for sawn hardwood has been strong.

While US exports of sawn hardwood did not increase significantly as a continuing trend in recent years, production, imports and, therefore, apparent consumption all increased in 2003. While US imports of Chinese furniture have caused a significant reduction in domestic demand for sawn hardwood since 2000, US exporters have not found that Chinese furniture manufacturers have demanded more US hardwood. In fact, the US furniture industry has seen a 57% decline in hardwood usage since 2000, while Chinese manufacturers have begun to source sawn hardwood and logs from Russia and tropical suppliers.

GRAPH 6.5.1

United States sawn hardwood prices, 2000-2004



Source: Hardwood Review, 2004.

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Chapter 7
2003 was the turning point in wood-based panel industries: Wood-based panels markets, 2003-2004[49]

Highlights

- Following two years of depressed markets and low prices, 2003 has witnessed the growth of most of the panel industries due to a healthier demand coupled with stronger prices in a context of increasing global markets.
- The particle board industry, both in western Europe and North America, has experienced further restructuring; some plants have closed and others have upgraded to more efficient production lines.
- The particle board industry was back on track at the end of 2003 as tightening of supply in western Europe and the United States, and increased demand in Europe, produced a positive effect on prices.
- European MDF and OSB markets boosted production and knocked down stocks and prices rose.
- The European plywood industry recorded positive results, but remains seriously affected by fierce foreign competition.
- Wood energy policies in Europe remain a concern to the wood-based panels industries, as wood raw material costs increased due to higher competition with bioenergy producers.
- Central and eastern Europe and the CIS subregion enjoyed clearly higher growth rates and increased capacity investments.
- North America's particle board industry marked a modest recovery on the back of exports, and cheaper furniture and cabinet imports from China and South-east Asia
- North America reconfirmed its world lead in the OSB business, as output was near full capacity driven by strong demand from the housing sector and record high prices.
- Plywood imports are substituting for decreasing domestic production in the US, and rising MDF imports made up for a downturn in US production after many years of continued production growth.

[49] By Ms. Eva Janssens and Dr. Nicolai Bordin

Secretariat introduction

We thank Ms. Eva Janssens,[50] Economic Advisor from the European Panel Federation, for this analysis, as well as Dr. Nicolai Burdin,[51] who contributed to the section on CIS countries. Ms. Janssens, a member of the UNECE/FAO Team of Specialists on Forest Products Markets and Marketing, used the EPF *Annual Report 2004* and its contributors in the different UNECE subregions to produce this chapter.

7.1 EU/EFTA subregion

Following two consecutive years of falling production in the particle board industry, 2003 represented a clear turnaround, with production picking up by 1.2%. While the first months of 2003 still appeared rather subdued and failed to incite optimism, the summer holidays marked the long-anticipated turning point for the particle board industry. Towards the end of the year, confidence increased and accelerating demand supported an increase in particle board production. In addition, demand developed at a faster pace than production during the last months of 2003, causing particle board stocks to fall. Local demand appeared to be the principal driver behind the recovery of the particle board industry during 2003. Following a major deterioration in consumption over 2002, demand rose in 2003 by 2.2%, to 26.1 million m^3. This development affected the whole EU/EFTA panels balance (table 7.1.1).

Over the first months of 2004, the renewed growth track was prolonged with gradually rising output, while stocks witnessed a striking drop. Prices that had been plummeting for a considerable time started to pick up again corresponding to the higher demand, though they still need to make up for increased production costs. During 2002-2003, the particle board industry experienced a serious restructuring period in line with poor demand and market conditions as well as with the increasing environmental and raw material supply constraints. Over the past two years, some two million m^3, or 4% of the particle board capacity within the EU/EFTA region, was taken off the market. Following earlier production falls, the beginning of 2004 saw some further closures, although the first signs of the recovery are expected to lead to a projected net capacity expansion of more than 500,000 m^3 by 2005.

TABLE 7.1.1

Wood-based panels balance in EU/EFTA, 2002-2003[52]

(1,000 m^3)

	2002	2003	Change %
Production	45 176	45 784	1.3
Imports	20 286	21 478	5.9
Exports	22 309	22 246	-0.3
Net trade	2 023	768	-62.0
Apparent consumption	43 153	45 016	4.3

Source: UNECE/FAO TIMBER database, 2004.

The European panels industries continue to face rising wood raw material costs. These costs have been rising significantly in several regions, which are not due to a physical shortage of wood, but primarily to increasing competition with the bioenergy producers. The latter are receiving more and more government support for using renewable energy sources such as biomass for so-called "green energy" and the authorities hope to achieve their Kyoto commitments on climate change. However, the utilization of wood fuels is being encouraged by a range of public financial support mechanisms which the industry feels create serious distortions in the panel industry wood supply chains. The European Panel Federation continues to address this policy issue to the authorities.

The MDF industry continued its solid growth track during 2003 and reached a new record production level at 8.7 million m^3, thus topping the previous record by nearly 7% (table 7.1.1). Over the past 10 years, MDF production has been rising consistently with an average annual growth rate of more than 15% in the EU/EFTA subregion. Consumption of MDF grew at a slightly faster pace than production and amounted to nine million m^3, resulting in a growth rate of 3.3%, which is slightly lower than the average annual growth rate over the past decade. The continued demand growth in many countries is primarily due to the so-called "laminate flooring effect". During 2003, European laminate flooring production increased by more than 10% and represents 68% of the global output, with Germany as the world's largest producer. Also in terms of demand, the EU/EFTA region is the most important market for laminate flooring, which increased by 11% during 2003. For 2004, MDF production and demand are expected to continue their unrelenting growth pattern. The first months of 2004 experienced a sharp drop in the stock levels, while prices picked up somewhat after bottoming out in mid-2003.

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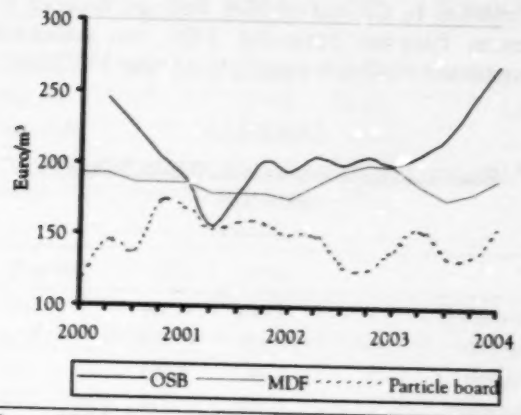
[52] Detailed tables of products' and countries' statistics may be found in the electronic annex at: www.unece.org/trade/timber/docs/fpama/2004/fpama2004.htm.

GRAPH 7.1.1

European OSB, MDF and particle board prices, 2000-2004



Notes: OSB/3 18mm, MDF standard 16-19mm, particle board V100 PF 19mm. Prices from Austria, Germany and Switzerland.
Source: *EUWID Wood Products and Panels*, 2004.

The highest growth rates in EU/EFTA panels were seen again in the OSB industry, reaching a new record level in consumption, with 2.4 million m³, or an increase of 16%, over the 2002. Since 1994, OSB production has been rising by an average annual increase of more than 30%. During 2003, the European OSB industry witnessed another remarkable evolution: driven by both favourable demand on the European markets as well as by exports in particular to the US, stocks have been following an extraordinary downward trend throughout the year, leading to a year-end reduction of more than 40%. In line with this development, average OSB prices have increased by about 35%, likening the first months of 2004 to the beginning of 2003. During the first half of 2004, stocks remained at their historically low level, while production continued to increase, spurred by solid demand in both the domestic and foreign markets. This also contributed to reducing the gap between capacity and output that had been created in 2001, when operating rates plunged to just 55% of capacity.

The plywood industry was stable with a slight 0.9% drop in production, remaining at 3.2 million m³, mainly due to a strong increase by Finland, which accounts for 40% of the total EU/EFTA output. Plywood consumption improved even more vigorously with a rise of 6%, although a setback was seen in the United Kingdom, Europe's largest consumer of plywood, with nearly 20% of the total. The UK demand fell considerably following sizeable import reductions from eastern Europe, Asia and South America. Environmental concerns were the major reason for the sharp decline in hardwood plywood imports from Brazil and Indonesia. Increased demand from the US in the international plywood markets has contributed to important price increases for imported plywood. Despite overall positive results, the plywood industry has also been confronted with some major difficulties over the past years. Since 2001, cheap imports of Chinese okoumé plywood are dramatically disturbing the European markets. Therefore, the European Commission decided to impose provisional anti-dumping duties of 48.5% against the majority of Chinese exporters, applicable for a period of six months, from 19 May 2004. The elimination of Brazil from the Preferential Tariff System means that Brazil will no longer benefit from reduced import tariffs for its wood products exported to the EU. The European Commission regularly reviews its trade regulations and found that Brazil had sufficiently developed its wood products trade, so that there was no longer a need to have preferential tariffs. Additionally with declining imports from Indonesia due to the increased difficulties in their raw material supply related to illegal logging problems, the EU plywood industry should soon notice some positive effects.

7.2 Other Europe subregion

With important representation in Bulgaria, the Czech Republic, Latvia, Poland, Romania and Turkey, the wood-based panels industries in the Other Europe subregion improved visibly in relative terms compared with the EU/EFTA region. Consumption of panels increased by 12.8% in 2003 to 14.1 million m³, 58% of which is particle board (table 7.2.1). The main producer countries were Poland, Turkey and the Czech Republic (in order of decreasing production). MDF consumption was also up by 16.5% to 2.3 million m³, while plywood showed a marginal increase to almost 1 million m³. Several new capacity expansions have been announced in this region, which are to a large extent based upon foreign investments benefiting from government support. The increasing importance of the central and eastern European countries (CEECs) also becomes obvious in the trade patterns (graph 7.2.1). In particular the intra-CEEC trade flows have been soaring by approximately 30% per year, while trade flows from EU/EFTA to CEECs rocketed by 40% in 2002. The trade flows do not show these countries' exports of value-added products, e.g. cabinets and furniture based on panels.

TABLE 7.2.1

Wood-based panels balance in Other Europe, 2002-2003

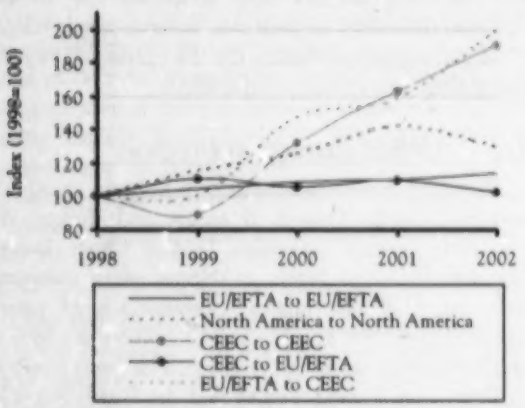
(1,000 m³)

	2002	2003	Change %
Production	12 901	14 635	13.4
Imports	4 799	5 898	12.4
Exports	5 267	5 898	12.0
Net trade	468	502	7.3
Apparent consumption	12 499	14 095	12.8

Source: UNECE/FAO TIMBER database, 2004.

GRAPH 7.2.1

Wood-based panel trade flows in the UNECE region, 1998-2002



Note: Full trade flow table in the electronic annex.

Source: UN COMTRADE/EFI, 2004.

7.3 CIS subregion

In 2003, strong growth in production and consumption of wood-based panels in Russia continued with the particle board markets, especially, performing dynamically (table 7.3.1). Production of particle board increased by 16% in 2003, while the plywood output improved by 8% against 2002 and fibreboard rose by 3%. Over the period 2000-2003, production growth of particle board and plywood each accounted for more than 30%, while fibreboard experienced 15% growth. In addition, domestic consumption of particle board increased by 20% during 2003, compared with 2002. Russian demand for plywood rose by 15% in 2003, while fibreboard registered an increase of 10%. Plywood is a key export product with the volumes destined for foreign markets amounting to 1.2 million m³ or 4% more than in 2002. Exports of particle board and fibreboard remained rather modest, with 185,000 m³ and 251,000 m³ respectively. Since September 2003, there is MDF production in Russia with a capacity of 128,000 m³. The expansion of MDF production is in progress with two new MDF plants planned for 200,000 m³ and 430,000 m³, which should be operational by the end of 2004. Both are financed by western European firms. For 2005, two additional investments would raise capacity by a further 350,000 m³.

TABLE 7.3.1

Wood-based panels balance in the Russian Federation, 2002-2003

(1,000 m³)

	2002	2003	Change %
Production	5 684	6 284	10.6
Imports	601	910	51.4
Exports	1 567	1 655	5.6
Net trade	966	745	-22.9
Apparent consumption	4 718	5 539	17.4

Source: UNECE/FAO TIMBER database, 2004.

7.4 North America subregion

Following several years of declines in the particle board sector, the North American markets experienced stabilization in 2003, with the total particle board output stagnating at 10 million m³. This is reflected in the subregional panel balance (table 7.4.1). This minor recovery was predominantly supported by enhanced exports, soaring by 24% and leading to an overall net positive trade balance. Domestic demand in North America failed to pick up and fell under the 10 million m³ threshold, returning to levels seen only at the beginning of the 1990s. Consumption was also influenced by increased imports of lower cost particle board cabinets from China and South-east Asia. In addition, after many years of continued expansion, the North American particle board industry has been forced into serious restructuring, with some 1.4 million m³, or nearly 14% of the total production capacity, taken off the market between 2001 and 2003. Nevertheless, a turnaround occurred at the end of 2003 with higher production levels, which continued into the first months of 2004. The two-year down-cycle of depressed prices came to an end as demand picked up. Particle board prices have soared in the first months of 2004, almost reaching the peak at the end of 1999 (graph 7.4.1).

TABLE 7.4.1

Wood-based panels balance in North America, 2002-2003

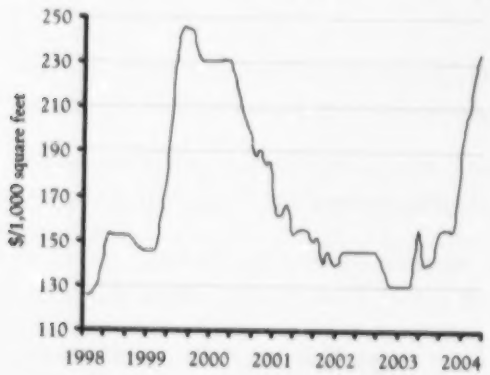
(1,000 m³)

	2002	2003	Change %
Production	56 944	57 349	0.7
Imports	17 694	18 378	3.9
Exports	14 114	14 381	1.9
Net trade	-3 580	-3 997	...
Apparent consumption	60 524	61 346	1.4

Source: UNECE/FAO TIMBER database, 2004.

GRAPH 7.4.1

Particle board prices in the United States, 1998-2004



Note: Underlayment grade on a 3/8-inch basis.
Source: Random Lengths Yardstick, 2004.

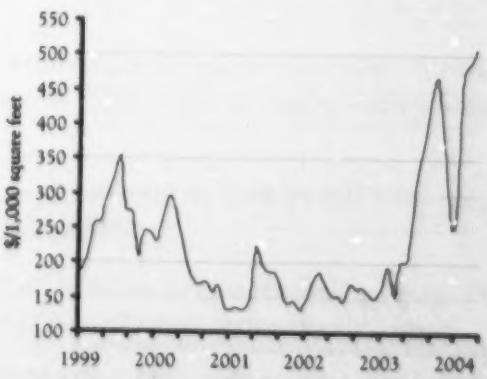
The North American MDF industry was confronted with a setback after a decade of non-stop growth rates. The overall production recorded a net decrease of 5% to just below 4.0 million m³, as both the US and Canada faced reductions of 3% and nearly 9% respectively. This downturn was mainly caused by a drop in domestic demand, particularly in Canada.

With particle board and MDF results remaining rather subdued, the OSB industry clearly outperformed other panel sectors due to continued demand from housing construction. North America is still by far the leading producer of OSB, with a share of 89% in world production, representing an output of 20.8 million m³ during 2003, which is 3% higher than 2002. The US produced 12 million m³, while Canada totalled 8.8 million m³. OSB consumption in North America was composed of 20.0 million m³ in the US and 1.4 million m³ in Canada. Canada is a major exporter of OSB, with 7.8 million m³ shipped to the US. Consequently, the US is a prime importer of Canadian OSB, in addition to some 200,000 m³ from Europe and 59,000 m³ from South America. Only one new OSB project is expected to start up in the US during 2004, while investments for a total capacity of roughly two million m³ have been announced for startup in 2005 and 2006. The industry has been operating at near full capacity, as demand remains strong. Price levels have followed, experiencing a dramatic increase in 2003, three times higher than the low at the beginning of the year (graph 7.4.2). The price swings have continued; much of the increase was lost by January 2004, however prices have picked up ever since and are higher than the 2003 peak.

In contrast to OSB, the North American plywood industry has been witnessing gradually reducing output volumes. Plywood production in North America in 2003 fell slightly, by 2.4% to 17.4 million m³, compared to an output of more than 19 million m³ in 2000. Consumption, on the other hand, has remained fairly stable over the past few years and in 2003 was 20.4 million m³. Since North American demand exceeds local supply, imports are needed, which primarily come from Brazil, followed by Russia, Indonesia and Malaysia, representing the same major "offshore" suppliers for the EU/EFTA region.

GRAPH 7.4.2

OSB prices in the United States, 1999-2004



Note: On a 7/16 inch basis.
Source: Random Lengths Yardstick, 2004.

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Chapter 8
Consumption climbs in central and eastern countries, stagnates in the west: Markets for paper, paperboard and woodpulp, 2003-2004[53]

Highlights

- Annual paper and paperboard output climbed by 2.2% in the EU/EFTA subregion in 2003, a record year for European papermakers, while the subregion's woodpulp output climbed by 2.8%.
- Higher paper and paperboard exports from the EU/EFTA subregion to non-UNECE countries, and a 16% increase in net exports in 2003, propelled expansion of output.
- Paper and paperboard consumption in central and eastern Europe was boosted by stronger regional economic growth in 2003, but the region also experienced a large increase in imports.
- Consumption of paper and paperboard in the Russian Federation increased by 12.1% in 2003, while production increased by 6.2%.
- Although Russian paper and paperboard exports greatly exceed imports in tonnage, the trade balance in product value continued to deteriorate in 2003, with increasing higher valued imports.
- Annual paper and paperboard output in North America receded by 1.2% in 2003, but output climbed in the second half of the year and the first half of 2004.
- With the exception of shipments to China and other countries in Asia, excluding Japan, total Canadian pulp, paper and paperboard product shipments to all major destinations declined.
- Paper and paperboard tariffs were set to disappear by the year 2004 and are at zero according to GATT (Uruguay Round of 1994), but punitive tariffs and an array of non-tariff barriers still exist, sometimes arising from trade disputes with a scope wider than the sector itself.
- Central and eastern European countries' exports of paper and paperboard grew more than in the other UNECE subregions, boosted by successful preparations for EU accession and investments in capacity by global pulp and paper industries.

[53] By Dr. Peter J. Ince, Prof. Eduard Akim, PhD, Mr. Bernard Lombard and Mr. Tomás Parik.

Secretariat introduction

The secretariat of the UNECE/FAO Timber Branch wishes to thank Dr. Peter Ince,[54] Research Forester, US Forest Service, for once again coordinating the production of this chapter with his co-authors. Professor Eduard Akim,[55] of the Saint Petersburg State Technological University of Plant Polymers and The All-Russian Research Institute of Pulp and Paper Industry produced the analysis of the Russian pulp and paper sector. Mr. Bernard Lombard,[56] Trade and Competitiveness Director, Confederation of European Paper Industries (CEPI), analysed the EU/EFTA subregion, and Mr. Tomás Parik,[57] Director, Wood and Paper, A.S., wrote about the developments in central and eastern Europe. We thank all of these authors for again providing a thorough analysis of paper, paperboard and woodpulp developments across the UNECE region.

8.1 Global and regional trends

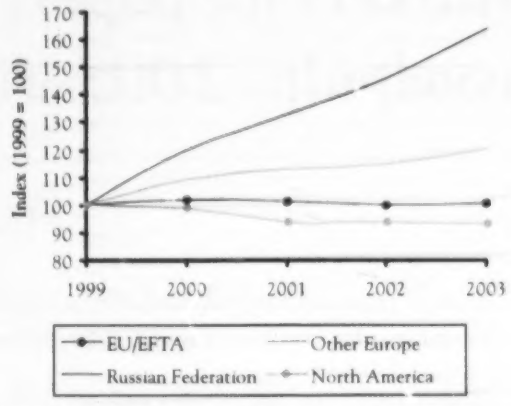
Global pulp, paper and paperboard markets generally improved in 2003, as indicated by higher prices for woodpulp than in 2002, but prices for many paper and paperboard commodities remained weak in 2003 and did not improve substantially until the first half of 2004 (*Pulp & Paper Week*). Recovered paper prices also increased in 2003, with higher demand for fibre in Asia, particularly in China, although shipping costs to Asian markets went up because of a large increase in ocean freight rates.

Within the UNECE region, a distinct divergence in market trends has emerged in recent years, and became more apparent in 2003, as shown by indices of paper and paperboard consumption (graph 8.1.1). Over the past five years, growth in consumption moderated in Europe and in North America (where consumption has actually declined in recent years) while consumption increased substantially in the Russian Federation and other European countries (chiefly central and eastern Europe). It can be noted, however, that consumption in Russia has yet to reach the previous peak levels of the 1988-89 period.

However, trade flows expanded even more, particularly EU/EFTA exports, notably to Asia (+48% since 2001) and both EU/EFTA's exports and imports to Other Europe and CIS.

GRAPH 8.1.1

Consumption of paper and paperboard in the UNECE region, 1999-2003



Notes: The Timber Committee's forecast trend for 2003 to 2004, made at the October 2003 session, was applied to the 2003 figure.
Sources: UNECE/FAO TIMBER database, 2004.

In Europe, a stronger euro and weaker dollar limited European price appreciation for pulp and paper commodities in 2003. Nevertheless, paper and paperboard output climbed by 2.2% in the overall EU/EFTA region, and by 2.1% for member countries of the Confederation of European Paper Industries (CEPI countries[58]), and thus 2003 was a record year for European papermakers.

North America, and the United States in particular, experienced an improvement in pulp and paper market conditions, particularly towards the second half of 2003 and continuing into 2004. The improvement in dollar-denominated prices for pulp and paper commodities was in part a reflection of the downturn in the exchange value of the dollar in 2003. Although paper and paperboard production began to increase in North America in 2003, particularly in the latter half of the year, US output in 2003 was lower than in 2002 (by 1.3%), and was 8.9% lower than the record output of 1999. North American output of paper and paperboard,

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[58] CEPI is a non-profit organisation representing the paper industries of 19 countries, including Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Hungary, Ireland, Italy, Norway, Poland, Portugal, Slovak Republic (associate member), Spain, Sweden, Switzerland, The Netherlands, and the United Kingdom. See www.cepi.org.

including both the US and Canada, was down by 1.2% in 2003 relative to 2002, and 7.4% below the 1999 level of production.

The global upturn and improvement in pulp, paper and paperboard markets was expected to continue into the second half of 2004 and 2005.

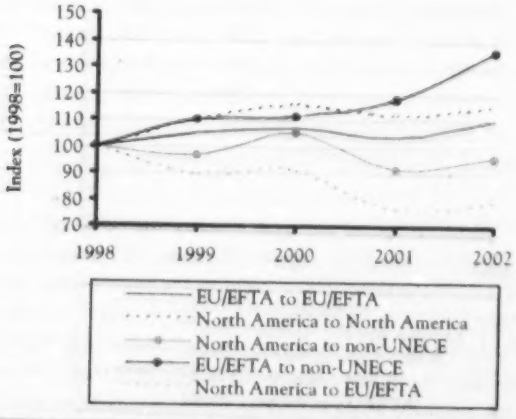
8.2 EU/EFTA subregion

For the EU/EFTA subregion, a 16% increase in net exports of paper and paperboard in 2003 helped propel expansion of paper and paperboard output. Also, in spite of a strong appreciation of the euro in 2003, export of paper and paperboard from the EU/EFTA region to non-UNECE countries increased.

The paper industry of the EU/EFTA region saw increased production and demand for paper and paperboard during 2003 compared with the previous year, albeit at different rates. Deliveries of paper to non-EU/EFTA countries rose substantially, while imports edged higher as well (graph 8.2.1). EU/EFTA exports to non-UNECE countries showed the largest index gains.

GRAPH 8.2.1

Paper and paperboard trade flows in the UNECE region, 1998-2002



Note: Full trade flow table in the electronic annex.
Source: UN COMTRADE/EFI, 2004.

Paper producers in the EU/EFTA region sustained high levels of output throughout 2003, with an increase in regional production of 2.2% over the output in 2002 (table 8.2.1). Similarly, there was a 2.1% increase in output for CEPI countries. Production in 2003 reached 90.6 million m.t. in the EU/EFTA region, and just over 95 million m.t. in CEPI countries. This was a record level of production for the EU/EFTA region, for CEPI countries as a group, and thus for Europe as a whole. Over the long term, output of paper and paperboard in Europe has increased on average by 3.5% per annum since 1991.

TABLE 8.2.1

Pulp, paper and paperboard balance in EU/EFTA, 2002-2003

(1,000 m.t.)

	2002	2003	Change %
Paper and paperboard			
Production	88 627	90 558	2.2
Imports	44 085	44 721	1.4
Exports	54 394	56 678	4.2
Net trade	10 309	11 957	16.0
Apparent consumption	78 318	78 601	0.4
Woodpulp			
Production	37 214	38 250	2.8
Imports	16 816	16 872	0.3
Exports	10 452	11 041	5.6
Net trade	-6 364	-5 831	...
Apparent consumption	43 578	44 081	1.2

Source: UNECE/FAO TIMBER database, 2004.

Output of graphics paper was up by 3.6% in the EU/EFTA region (and by 3.2% for CEPI countries). Just over a third of this increase was attributable to increased production of newsprint. There was virtually no change in the production of uncoated graphic grades, whilst output of coated grades increased sharply. Mechanical grades outperformed woodfree grades.

Production of packaging grades increased by 0.6% in the EU/EFTA region (and by 0.8% for CEPI countries). Case material production rose along with output of paperboard, but there were declines in production of both wrappings and all other packaging grades.

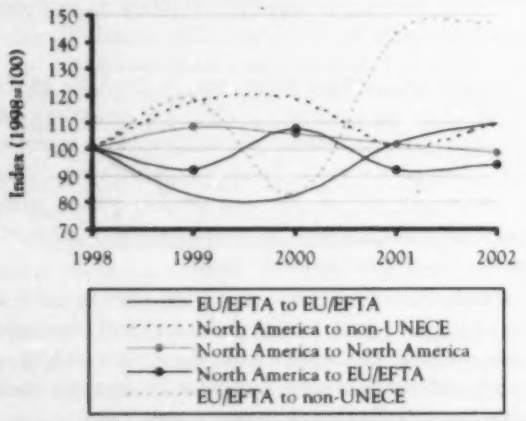
As in previous years, output of pulp rose very much in line with paper and paperboard production. Total output of both integrated and market pulp in the EU/EFTA region reached 38.3 million m.t. in 2003, an increase of 2.8% over 2002.

Overall consumption of paper and paperboard rose by 0.4% in the EU/EFTA region (and by 0.6% in CEPI countries). Consumption in 2003 totalled 78.6 million m.t. in the EU/EFTA region, and 86 million m.t. in CEPI countries. At the same time GDP contracted in the euro region during the first half of 2003, and proved to be not very dynamic, increasing by just 0.5% during the year.

The increase of paper and paperboard production in the EU/EFTA region was substantially more than the increase in consumption because of increased exports. Net exports of paper and paperboard from the EU/EFTA region increased by 16%, while exports of paper and paperboard from CEPI countries to markets outside of the CEPI region increased by 14.4% (reaching 13.2 million m.t.). Shipments from CEPI countries to Asian markets accounted for 38% of exports (4.9 million m.t.) and have increased by 48% since 2001. Exports to European countries outside of the CEPI area rose by 23%, and to North America by 12.6%. More than half of the increase in woodpulp output of the EU/EFTA region in 2003 was attributable to expansion in woodpulp exports. EU/EFTA woodpulp exports to non-UNECE countries registered the largest gains among regional indices of woodpulp trade flows in recent years (graph 8.2.2).

GRAPH 8.2.2

Woodpulp trade flows in the UNECE region, 1998-2002



Note: Full trade flow table in the electronic annex.
Source: UN COMTRADE/EFI, 2004.

Consumption of recovered paper continued to increase among CEPI countries, reflecting the combined influence of government pro-recycling policies, expanded technological capabilities within the industry and favourable market conditions. Utilisation was up by 1.6%. Apparent collection also increased by 2.5%.

8.3 Other Europe subregion

Paper and paperboard consumption in central and eastern Europe was boosted by stronger regional economic growth. With GDP in central and eastern European countries (CEECs) growing by 3.8% in 2003, the Other Europe subregion experienced a 5.1% increase in paper and paperboard consumption (table 8.3.1). However, the subregion also experienced a 14.1% increase in imports and a decline in net exports.

Since May of 2004 most of the CEECs are members of the EU. Several years of preparation for entering the EU significantly influenced the economies and markets for products as well as raw materials in the CEECs. Most changes were experienced during the years of preparation, and therefore entering the EU in 2004 was a culmination of gradual change throughout most of the region. The most significant changes were the higher speed of transport of goods and lower market barriers between CEECs and other EU countries.

TABLE 8.3.1

Pulp, paper and paperboard balance in Other Europe, 2002-2003

(1,000 m.t.)

	2002	2003	Change %
Paper and paperboard			
Production	8 436	8 367	-0.8
Imports	5 608	6 398	14.1
Exports	3 687	3 877	5.2
Net trade	-1 922	-2 521	...
Apparent consumption	10 357	10 888	5.1
Woodpulp			
Production	3 263	3 246	-0.5
Imports	1 520	1 652	8.7
Exports	651	681	4.6
Net trade	-869	-971	...
Apparent consumption	4 132	4 217	2.1

Source: UNECE/FAO TIMBER database, 2004.

Global enterprises control most of the pulp and paper industry in the Other Europe subregion, and production is focused on export. These countries' markets have great potential for economic growth and increased consumption. Increasing consumption is being met by significantly higher imports. In the CEECs there are still some production gaps in more sophisticated paper grades. The region is a net importer of both pulp and paper: the net imports of the latter group expanded by half a million m.t. in 2003, contradicting the popular vision of this region as a low-cost exporter "flooding" western markets.

Most of the CEEC producers are already complying with world standards of environmental protection, including forest management certification in many countries. There is concern about illegal logging in the CEECs, but the extent and causes of the phenomenon are not well known or understood. The topic will be examined by a UNECE/FAO workshop in September 2004 and the joint UNECE Timber Committee and FAO European Forestry Commission session in October 2004.

Bioenergy is one of the key issues in the Other Europe subregion that is seen both as a threat and as an opportunity. Local governments are preparing strategies for bioenergy production. Wood supply to the timber industry virtually everywhere can be influenced by demand for biofuels. However, so far the difficulties with wood supply, which have appeared to be in Poland and Hungary, cannot be regarded solely as a result of bioenergy policy. Future development in the area of bioenergy is not certain, but it may influence future wood availability and, in fact, the entire timber industry.

The CEECs now have an economic environment similar to that of other EU countries. Problematic issues emerge sometimes due to less experience or to the shorter time in which society has developed under new economic conditions. However, paper and paperboard markets, as well as production in the Other Europe subregion, in all respects has been of world-class quality, although still partly considered as a lower price market with lower price products. Further dynamic development of the economy can be expected, correlated with a growing pulp and paper market in the CEECs.

8.4 CIS subregion

In 2003 and the first half of 2004, Russia and other CIS countries continued to experience an economic upturn. With aggregate real GDP growth in the CIS of 7.6% in 2003, and GDP growth of 7.3% in the Russian Federation, it was not surprising that production and apparent consumption of paper and paperboard increased within the region.

Consumption of paper and paperboard in the Russian Federation, for example, increased by 12.1% in 2003, while annual production increased by 6.2% or less (4.3% according to data reported by Goscomstat of the Russian Federation, and PPB-express) (table 8.4.1). The tonnage of paper and paperboard imports increased by 21.6% in 2003, as did the value of imports.

During 2003, total output of woodpulp (both pulp for paper or paperboard and market pulp) increased by approximately 2.4%. Since 1998, following a significant revaluation of Russia's currency, there has been a continuous increase in output of pulp, paper and paperboard, although output has yet to reach the previous record output levels of the 1988-1989 pre-transition period.

There was only modest growth in Russian exports of pulp and paper products in 2003, with the tonnage of paper and paperboard exports increasing by 0.2% or more, and market pulp exports increasing by 1.1% or more (graphs 8.4.1 and 8.4.2).

TABLE 8.4.1

Pulp, paper and paperboard balance in the Russian Federation, 2002-2003

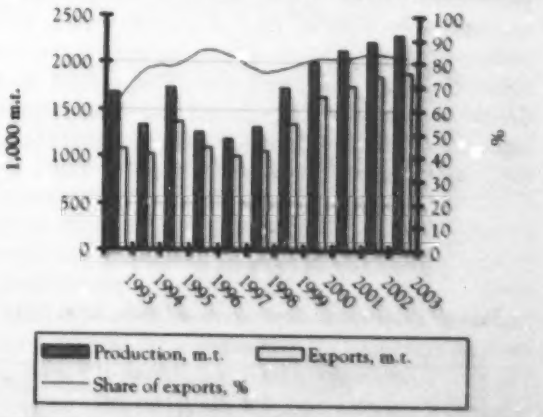
(1,000 m.t.)

	2002	2003	Change %
Paper and paperboard			
Production	5 978	6 349	6.2
Imports	638	776	21.6
Exports	2 458	2 464	0.2
Net trade	1 820	1 688	-7.3
Apparent consumption	4 158	4 661	12.1
Woodpulp			
Production	6 512	6 671	2.4
Imports	47	48	2.1
Exports	1 885	1 905	1.1
Net trade	1 838	1 857	1.0
Apparent consumption	4 674	4 814	3.0

Source: UNECE/FAO TIMBER database, 2004.

GRAPH 8.4.1

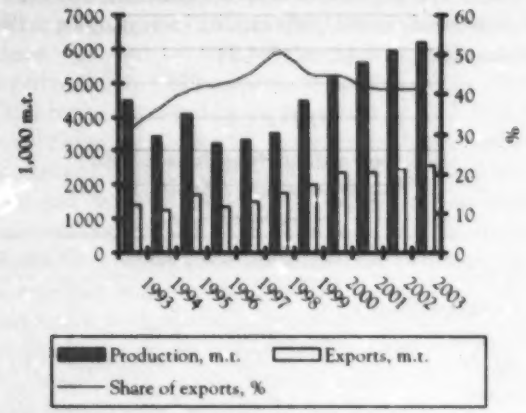
Exports of market pulp in Russia, 1993-2003



Sources: Goscomstat of the Russian Federation, PPB Exports and the author's data interpretation, 2004.

GRAPH 8.4.2

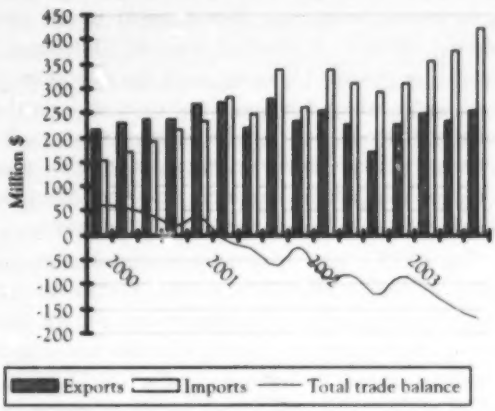
Exports of paper and paperboard in Russia, 1993-2003



Sources: Goscomstat of the Russian Federation, PPB Exports and the author's data interpretation, 2004.

GRAPH 8.4.3

Russia's paper and paperboard exports and imports 2000-2003



Sources: State Customs Committee, PPB Magazine, PPB Exports, PPB Imports and the author's data interpretation, 2004.

Russian exports as a percentage of production have remained largely unchanged since 1996, with exports comprising about 80% of market pulp output, and around 40% of paper and paperboard (graphs 8.4.1 and 8.4.2). Major export destinations for these Russian products are China (market pulp, kraft linerboard), Ireland (market pulp, kraft linerboard), India (newsprint), and Turkey (newsprint).

Although the tonnage of Russian paper and paperboard exports greatly exceeds the tonnage of imports (2.46 million m.t. of exports versus 0.78 million m.t. of imports in 2003), the trade balance in value continued to deteriorate. The annual trade deficit in paper and paperboard has been negative since 2001 and it reached $498 million in 2003 (table 8.4.2 and graph 8.4.3).

TABLE 8.4.2

Value of Russian paper and paperboard trade, 2000-2003

(Million $)

	Exports	*Imports*	*Total trade balance*
2000	920	731	+189
2001	927	1 012	-85
2002	887	1 200	-313
2003	967	1 465	-498

Sources: State Customs Committee, PPB Magazine, PPB Exports, PPB Imports and the author's data interpretation.

The higher value of imports of paper and paperboard as compared to their exports is mainly due to the fact that Russia is importing rather expensive products, such as high quality materials for container and packaging, clay-coated paper and tissue, whereas less expensive commodity products are being exported, including newsprint and kraft linerboard. It can also be noted that the exchange value of the Russian rouble has increased in recent years, affording increased imports of more expensive goods.

It should be noted that trends in Russia's economy and market, along with initiatives in political and industrial development, testify to an expanding future for Russia's pulp and paper sector, with expanding production and increasingly integrated utilisation of forest resources.

8.5 North America subregion

In the US, paper and paperboard output in 2003 was 1.3% lower than in 2002, but output began to increase with robust economic expansion in the second half of 2003 and continuing through the first half of 2004. A distinct upturn in US industrial output in the second half of 2003 and into 2004 stimulated increased domestic demand for paper and paperboard (in packaging and print advertising). The upturn in paper and paperboard output (as well as overall industrial output) was supported by depreciation in the exchange value of the dollar.

Higher orders and production volumes offset lower average prices for paper and paperboard in the first quarter of 2004, when prices bottomed out, followed in the second quarter by announced price increases for key pulp, paper and paperboard grades. Advertising expenditures and demand for packaging rebounded in the first half of the year. Export markets also improved as the weaker dollar afforded improved cost competitiveness for US producers.

Historically there has been a lag between shifts in the dollar exchange value and the US trade balance, so, not surprisingly, the overall trade deficit in goods continued to increase and reached record levels in 2004. Likewise, the tonnage of graphic paper imports increased by 7.0% in 2003. However, th tonnage of packaging paper and paperboard imports receded by 5.6% in 2003, and overall US pulp, paper and paperboard exports increased by 1.4% in 2003, with continued robust expansion of exports in 2004.

The strong appreciation of the Canadian dollar against the US dollar in 2003 depressed Canada's exports of pulp, paper and paperboard products, with a 1.0% drop in exports to the US (Pulp and Paper Products Council of Canada, 2004). Overall mill operating rates in Canada remained at 92% in 2003, the same level as in 2002.

Except for shipments to China and countries in Asia other than Japan, Canadian shipments of pulp, paper and paperboard products to all major destinations declined in 2003 (including shipments to markets within Canada, as well as shipments to Europe, Latin America, Japan and the US). Shipments to China, however, jumped by 39% to 1.5 million m.t. in 2003 (Pulp and Paper Products Council of Canada 2004). Thus, the significant increase in shipments from Canada to China was sufficient to provide Canada with a small gain in total shipments (0.4% in 2003). If the increase in shipments to China were deducted, Canada's overall shipments would register a decline of about 1%.

Overall North American production of paper and paperboard receded by 1.2% in 2003 (reflecting a decrease in US output, and a slight increase in Canadian output (table 8.5.1). Apparent consumption declined by 0.7%, but as noted previously, demand and prices have been improving in 2004. Production of woodpulp in North America increased by 0.1% in 2003, with a slight decrease in US woodpulp output and increase in Canadian woodpulp output.

8.6 Trade barriers still exist

One important economic and policy concern related to international markets for pulp, paper and paperboard commodities is the continued existence of trade barriers, including technical barriers such as anti-dumping measures and retaliatory tariffs, as well as uneven trade advantages that stem from divergent tax rules or environmental rules and labour standards (or lack thereof). According to the sectoral agreement from the GATT Uruguay Round of 1994, paper and paperboard tariffs were set to disappear by the year 2004 and are at zero, at least in trade between major industrial countries, but technical trade barriers still exist and have expanded in the past year, in some cases as a consequence of trade policy disputes with a much wider scope than the forest products sector.

TABLE 8.5.1

Pulp, paper and paperboard balance in North America, 2002-2003

(1,000 m.t.)

	2002	2003	Change %
Paper and paperboard			
Production	102 105	100 900	-1.2
Imports	18 768	19 513	4.0
Exports	23 480	23 743	1.1
Net trade	4 712	4 231	-10.2
Apparent consumption	97 393	96 669	-0.7
Woodpulp			
Production	79 332	79 386	0.1
Imports	6 841	6 526	-4.6
Exports	17 779	16 806	-5.5
Net trade	10 938	10 280	-6.0
Apparent consumption	68 393	69 106	1.0

Source: UNECE/FAO TIMBER database, 2004.

A leading example is the punitive tariffs that were imposed recently by the European Union on more than 1,600 US export products, including more than 165 wood and paper items, in retaliation for US Foreign Sales Corporation and Extraterritorial Income (FSC-ETI) export tax provisions. The FSC-ETI provisions granted partial tax exemptions for income from foreign sales or extraterritorial income, but the World Trade Organization (WTO) deemed the provisions an illegal export subsidy. As a result, the EU imposed retaliatory tariffs on US products, including many wood and paper products, with tariffs scheduled to increase if FSC-ETI provisions were not repealed.

Both US President George W. Bush (White House press release, 1 March 2004) and the leading US pulp and paper trade association (AF&PA) expressed their support for repeal of the FSC-ETI tax provisions in order to avoid the punitive EU sanctions. As of June 2004, both the US House of Representatives and the Senate have passed bills to repeal the provisions. It is therefore likely that the FSC-ETI provisions will be repealed soon, and the EU

sanctions will then be removed. However, the punitive tariffs on US exports were still in place as of mid-2004.

In the meantime, other punitive tariffs on paper products have arisen elsewhere. In 2004, for example, the Chinese Government extended anti-dumping duties on newsprint imports from the US, Canada and other countries for five years.

Non-tariff trade barriers or uneven economic advantages are also created by divergence in global acceptance and enforcement of environmental protection standards, worker protection and safety standards, health benefits and minimum wage standards (or the lack thereof). Along with state subsidies or loans for industrial development and fixing of currency exchange rates at artificially low levels by some countries, trade barriers or artificial trade advantages continue to exist, together with anti-dumping measures and retaliatory tariffs.

Thus, although paper tariffs were set to disappear under the agreement with GATT, retaliatory tariffs and other trade barriers still exist, which affect markets and trade in the pulp, paper and paperboard sector. The continued existence of trade barriers is of particular concern to the pulp, paper and paperboard industry, given the global nature of its business and the commodity structure of some markets within the sector.

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Chapter 9
Public procurement policies boost demand: Certified forest products markets, 2003-2004[59]

Highlights

- Worldwide, the area of certified forest continued to rise over the last year, reaching 176 million hectares by mid 2004, an increase of 17%.
- Half the world's certified forest area is in North America, with another 40% in western Europe; Canada, the United States and Finland have the largest area of certified forest.
- Growth in the area of forestland certified by the major schemes slowed in 2003, with the notable exception of the Canadian Standards Association scheme, which doubled its area.
- Public procurement policies continue to be a driving force for certification and an important source of demand for certified forest products (CFPs).
- Demand for CFPs by private end-consumers remains minor, which is a major obstacle to market growth; however, general consumer sentiment about deforestation and forest degradation keeps the sector under pressure to act.
- Illegal logging dominates governmental political discussions related to forest products in 2003 and 2004; however, voluntary certification systems cannot guarantee legality.
- Chain-of-custody (CoC) certificates increased by about 50%, reaching almost 4,500 certificates worldwide, driven mainly by a doubling of the Programme for the Endorsement of Forest Certification Schemes (PEFC) certificates, which now constitute 30% of total certificates.
- Germany and France are leading in CoC certificates within the UNECE region, while Japan and Brazil have more certificates outside the UNECE region.
- Policies have been developed by which forest certification could potentially play a role as a verification mechanism for small-scale afforestation and reforestation projects under the clean development mechanism in the first commitment period of the Kyoto Protocol.
- Mutual recognition between the Forest Stewardship Council (FSC) and the PEFC is not expected; however, the other major schemes have established mutual recognition agreements between themselves and the PEFC.

[59] By Mr. Florian Kraxner and Dr. Ewald Rametsteiner.

Secretariat introduction

Certified forest products markets (CFPs) and certification of sustainable forest management continue to receive considerable international attention, in part as a result of Government attention to forest law enforcement and governance issues. Forest products traders use certification to ensure customers of the sustainability and source of wood products.

The UNECE Timber Committee has a mandate to monitor the markets for CFPs, and the FAO European Forestry Commission follows developments in certification of sustainable forest management. This chapter focuses on the market aspects. At its annual market discussions, the Timber Committee addresses issues related to CFPs. The Committee has called certification a communications tool to bring the message about the region's sustainable forest management from producers to consumers.

The basis for the information in this chapter is not the UNECE/FAO TIMBER database, which is based upon country-supplied statistics, as in the previous chapters. No official statistics exist on CFPs because they are not currently recognized in customs classification codes. Instead, the analysis here relies on interviews with key producers, retailers of CFPs, Global Forest and Trade Networks and auditing bodies and certification systems, as well as information from the Committee and Commission's officially nominated country correspondents on CFPs and certification of sustainable forest management. The secretariat thanks all those who responded to the authors' surveys. Unless otherwise attributed, all estimates and opinions in this chapter are from the authors' interpretations and analysis of the results of these surveys.

We sincerely appreciate the ongoing cooperation with Mr. Florian Kraxner, who for the first time led the production of this chapter, and Dr. Ewald Rametsteiner, both Experts on CFP markets from the University of Natural Resources and Applied Life Sciences (BOKU), Vienna, Austria. Their up-to-date and informative analysis of the markets for CFPs provide valuable insight into this market segment.

The Committee and the Commission have followed certification issues in a series of UNECE/FAO *Geneva Timber and Forest Discussion Papers*.[60]

9.1 Introduction

CFP markets have been analysed in a regular chapter in the UNECE/FAO *Forest Products Annual Market Review* since 1998. This year's discussion concentrates on the market, trade and policy aspects of CFPs. CFPs bear labels demonstrating, in a manner verifiable by independent bodies, that they come from forests that meet standards for sustainable forest management. Consumers might find labels on furniture and wood products, while manufacturers can verify the sources through the certification scheme chain-of-custody (CoC) procedures. Non-independently certified forests or CFPs, and process certification schemes such as ISO 14001, are not included, as these do not generally lead to CFPs.

9.2 Supply of CFPs

By May 2004 the total area of forests certified worldwide totalled 176 million hectares, or about 4.5% of the world's forests (3869 million hectares). In mid-2003 the total was 150 million hectares. Since 2000 there has been an exponential increase of forest area certified mainly by the:

- American Tree Farm System (ATFS) in the United States.
- Canadian Standards Association (CSA) system.
- Forest Stewardship Council (FSC).
- Programme for the Endorsement of Forest Certification Schemes (PEFC), formerly known as the Pan European Forest Certification System.
- Sustainable Forestry Initiative (SFI) in North America.

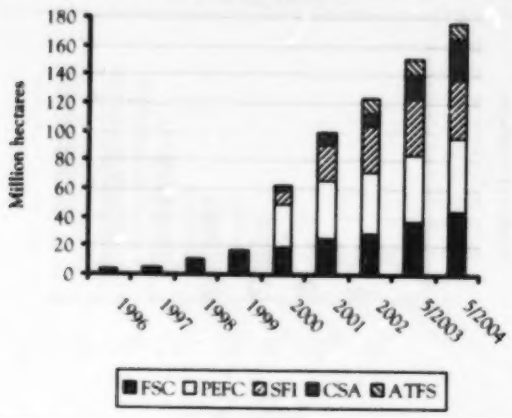
In addition, the international Dutch Keurhout system has approved 1.2 million hectares of independently certified forests in Gabon.

During the last year the area of certified forests has again increased (graph 9.2.1). However, the rates of increase in the areas certified by the major schemes have slowed, with the exception of CSA in Canada. In terms of market share, PEFC is still the dominant scheme, with approximately 29% of all certified forest, ahead of FSC (25%) and followed by SFI (23%). More than 90% of all certified forest is in the northern hemisphere, with approximately 47% in North America and 45% in Europe. Oceania accounts for around 6% of the total certified forest area, while Latin America and Asia have only 3% and 2% respectively (graph 9.2.2).

[60] www.unece.org/trade/timber/mis/cfp.htm

GRAPH 9.2.1

Area of certified forest, 1996-2004

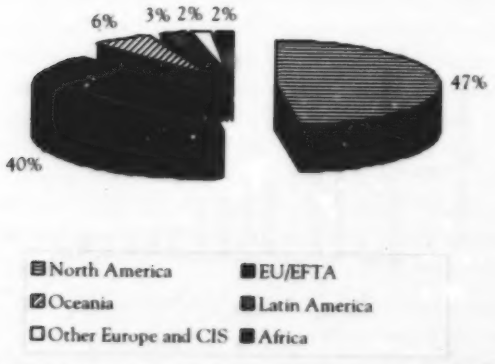


Notes: FSC = Forest Stewardship Council, PEFC = Programme for the Endorsement of Forest Certification Schemes, SFI = Sustainable Forestry Initiative, CSA = Canadian Standards Association system, ATFS = American Tree Farm System.

Sources: Individual certification systems and country correspondents, 2004.

GRAPH 9.2.2

Geographical distribution of forest area certified, 2004



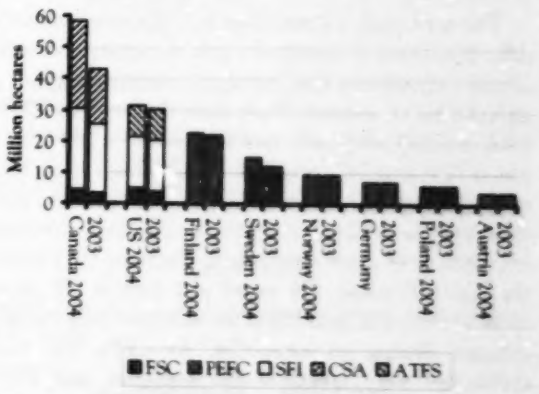
Notes: The graph contains overlaps owing to double certification. Asia's share is 0.3%.

Sources: Individual certification systems and Forest Certification Watch, 2004.

The gap between the area of certified forests in developed and developing countries is still increasing. In Europe, 45% of the current forest area[61] is already certified, compared with around 18% in North America and less than 0.5% in Russia. The ranking of the top eight countries is the same as the previous year (graph 9.2.3). In 2004, the potential roundwood supply from the world's certified forests is estimated[62] at slightly more than 305 million m^3. This equates to 19% of the world's production of industrial roundwood, or about 28% of the industrial roundwood production of Europe and North America, where certified forests are mainly situated. The rate of certifying has slowed within the last year as the total forest area certified increased by only 1.7%.

GRAPH 9.2.3

Top 8 countries' certified forest area, 2003-2004



Notes: The graph contains overlaps owing to double certification. Areas for 2004 are as of May.

Sources: Individual certification systems, country correspondents, Forest Certification Watch, 2004.

In countries such as Finland and Austria, which have certified essentially all of their forests, most forest products are sold without any reference to certification. This represents a lost opportunity, since without a label or CoC certificate the certification process has lost much of its marketing and public-relations value. The principal reason for this situation might be the lack of demand by downstream industry and consumers, but may also be a question of time and interest.

[61] The reference area is based on UNECE/FAO *Temperate and Boreal Forest Resources Assessment 2000* (TBFRA 2000) data for forest area, excluding other wooded land (forest area in Europe excludes CIS countries).

[62] The estimation is based on UNECE/FAO TBFRA statistics for each country's average annual removals per hectare on forests available for wood supply multiplied by the certified forest area.

9.3 Demand for CFPs

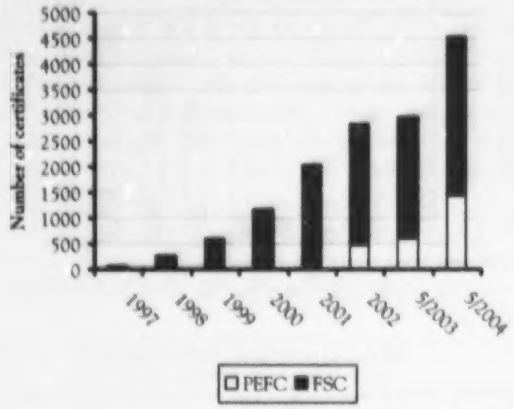
A significant proportion of wood from certified forests is sold without any reference to its certification status. Though the amount is steadily increasing, currently, only a small, although growing, proportion of wood from PEFC certified forests is actually traded as CFPs throughout the wood-processing chain. This may be due to low interest in some manufacturing industries or the "own-label only" policies of some major retailers. Some key wood products retailers prefer to use only their own label to assure customers of the origin and sustainability of their products, rather than align themselves with any one scheme. Tropical wood CFPs are currently available only in comparatively small quantities, and still suffer from unstable supply. Nevertheless, do-it-yourself chains in several European countries, including the United Kingdom, Germany, the Netherlands and Austria (considered the leading CFP markets in Europe) are increasingly selling FSC-certified tropical timber.

The total market share taken by CFPs continues to be difficult to assess as a result of a lack of customs coding for official trade figures. CoC certificate statistics may act as an indicator of demand. These show that by May 2004 a total of 4,528 certificates had been issued worldwide, of which 70% were FSC and 30% PEFC. This is an increase of approximately 50% from last year. Again, PEFC more than doubled its CoC certificates, mainly due to increases in France (344 more certificates), Germany (153 more), the Czech Republic (84 more) and Austria (76 more) (graph 9.3.1). FSC and PEFC are still effectively the only schemes offering an entire CoC for CFPs. FSC CoC certificates were issued in 66 countries and PEFC certificates in 15 countries.

The geographical distribution of (potential) demand for CFPs in business-to-business markets, according to the total number of CoC holders, shows that Germany leads the ranking in the UNECE region (graph 9.3.2). While the number of FSC CoC certificates in Germany remained nearly the same as last year, there was a significant increase in PEFC certificates, which currently represent two thirds of all German certificates. France is rated second with approximately 90% PEFC certificates, ahead of the United States with only FSC certificates (graph 9.3.3). The graph also shows that national markets are tending to converge toward one of the major schemes.

GRAPH 9.3.1

Certification chain-of-custody trends worldwide, 1997-2004

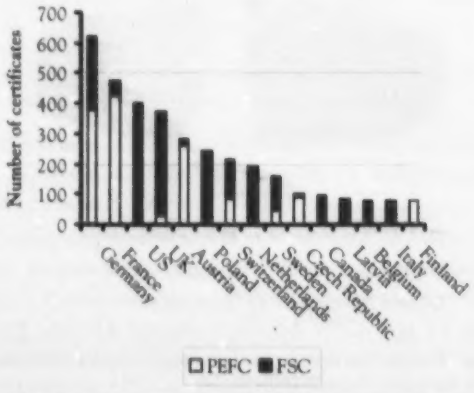


Note: The numbers denote CoC certificates irrespective of the size of the individual companies.

Sources: Forest Stewardship Council and Programme for the Endorsement of Forest Certification Schemes, 2004.

GRAPH 9.3.2

Chain-of-custody certificate distribution in the UNECE region, 2004

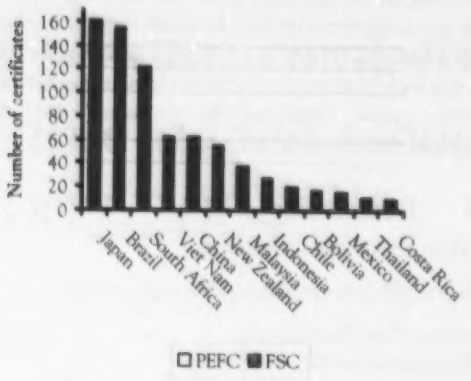


Notes: The graph is not comprehensive regarding countries with less than 10 CoC certificates. The numbers denote CoC certificates irrespective of the size of the individual companies as of May 2004.

Sources: Forest Stewardship Council, Programme for the Endorsement of Forest Certification Schemes and authors' compilation, 2004.

GRAPH 9.3.3

Chain-of-custody certificate distribution outside the UNECE region, 2004



Notes: The graph is not comprehensive regarding countries with less than 10 CoC certificates. The numbers denote CoC certificates irrespective of the size of the individual companies as of May 2004.

Sources: Forest Stewardship Council, Programme for the Endorsement of Forest Certification Schemes and authors' compilation, 2004.

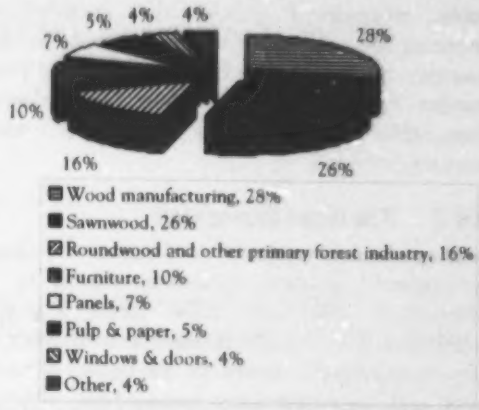
A wide range of wood-based industries and trade sectors hold CoC certificates according to the product distribution of FSC CoC certificates, which constitute 70% of the total certificates worldwide. Companies holding FSC CoC certificates cover a comparatively wide range of sectors, while the majority of certified companies operate in wood manufacturing and sawnwood production (approximately 25% each), followed by roundwood. Certificates in the furniture sector hold a 10% share (graph 9.3.4). Companies with PEFC CoC certificates (30% of the total) are mainly active in roundwood trading (50%) and sawmilling (32%), as well as more upstream sectors in the value chain (graph 9.3.5).

The FSC logo has been in use for more than a decade now. The PEFC started to issue licences for logo use relatively recently, in 2001. A total of 11,300 companies to date have the right to use the PEFC logo, 55% of which are in Germany and 35% in France. Both the SFI and the CSA systems in North America have developed logos, licensing procedures and on-product labelling.

Demand by private end-consumers remains a minor factor in the market for CFPs. Nevertheless, general consumer sentiment on deforestation, forest degradation and loss of biodiversity, and notably on tropical deforestation, keeps the sector under pressure to act. Forest certification is increasingly becoming a principal instrument for communication through enhanced public relations efforts on sustainable forest management throughout the forest and trade sectors, with enhanced public relations efforts. Many active market players view the lack of consumer awareness and interest as a major obstacle to market growth.

GRAPH 9.3.4

FSC worldwide chain-of-custody distribution by industry sector, 2004

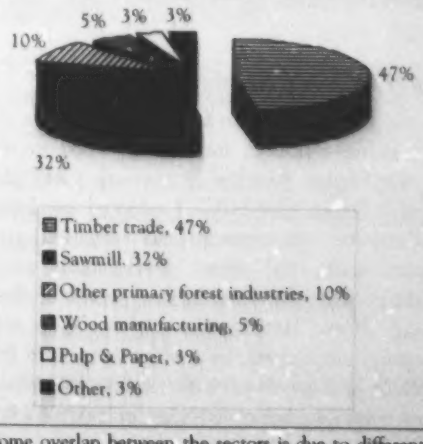


Notes: Some overlap between the sectors is due to different data. Other includes sawmill by-products, 2%, construction, 1%, wood product trade and retailers, 1%, Do-It-Yourself products, 0.2%.

Source: Forest Stewardship Council, 2004.

GRAPH 9.3.5

PEFC chain-of-custody distribution by industry sector, 2004



Notes: Some overlap between the sectors is due to different data. Other includes wood products trade and retailers, 2%, construction, 1%, other primary forest industries, 0.2%.

Source: Programme for the Endorsement of Forest Certification Schemes, 2004.

9.4 Policy issues

9.4.1 *Public procurement policies*

Public procurement policies continue to be a driving force for certification and a source of demand for CFPs. Several national Governments in European markets, including the United Kingdom, the Netherlands, Denmark, France and Germany, have communicated public procurement policies that include criteria favouring the purchase of CFPs, notably from tropical countries. Similar policies exist at the municipal level in a number of UNECE-region countries. The conformity of these public procurement policies with WTO rules has not yet been tested.

9.4.2 *The illegal logging issue*

Illegal logging continued to dominate the agenda of governmental political discussions related to forest products in 2003 and 2004. Illegal logging and certification were initially discussed as overlapping issues, along with related concerns, i.e. the legality of harvested wood and sustainable forest management, although in reality they are quite distinct issues. Some progress was made in defining the concept of legality more appropriately in different contexts. Nevertheless, there are difficulties in defining and verifying the legality of timber. Currently policies keep the legality of timber a distinct issue from the quality and certification of forest management. It is true that certified timber should be "legal", as adherence to national laws is required by all certification schemes, but uncertified timber may be legal or illegal.

9.4.3 *Carbon sequestration verification*

A third issue related to forest certification is verifying carbon sequestration in forests and wood products. In 2003 the United Nations Framework Convention on Climate Change (UNFCCC) adopted modalities and procedures for afforestation and reforestation project activities under the clean development mechanism (CDM) in the first commitment period of the Kyoto Protocol. Forest certification might play a role as a verification mechanism, in a wider context of simplified modalities and procedures, for small-scale afforestation and reforestation project activities under the CDM.

9.4.4 *Mutual recognition*

PEFC has remodelled itself as a scheme with a global reach and has renamed the initiative to reflect this, hence the new title, Programme for the Endorsement of Forest Certification Schemes. Currently, there are 27 national schemes endorsed by PEFC and a further 5 are being assessed (in Australia, Chile, Italy, New Zealand and Portugal).

FSC also runs programmes to accredit national and sub-national standards that comply with FSC requirements. FSC is not pursuing a policy of mutual recognition accreditation. Worldwide, FSC and PEFC now endorse or accredit over 50 national schemes. However, mutual recognition between these two schemes is not expected. There is a concern at the policy level that this lack of mutual recognition between certification schemes could "confuse the consumer" and thus discourage the sound use of wood.

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Forest Products Annual Market Review 2004 Chapter 9. CFPs

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FSC, Germany: http://www.fsc-info.org

NavigationMenu/Environment_and_Recycling/SFI/SFI.htm

PEFC Czech Republic: http://www.pefc.cz/register/

Programme for the Endorsement of Forest Certification Schemes, PEFC: http://www.pefc.org

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UNECE/FAO Geneva Timber and Forest Discussion Papers. "Forest Certification Update for the UNECE Region, Summer 2002": http://www.unece.org/trade/timber/docs/dp/dp-25-cert.pdf

UNECE/FAO Geneva Timber and Forest Discussion Papers. Forest Certification Update for the UNECE Region in 2003 (in process)

Chapter 10
European industry tackles policy issues to remain competitive: Value-added wood products markets, 2003-2004[63]

Highlights

- The temporary drop in world trade of value-added wood products (VAWPs) in 2001 was reversed in 2002, with a strong 10% growth to $36.5 billion as measured by world imports, which continued in some sectors in 2003.
- European woodworking industries are developing policies to promote growth in demand for wood products and the integration of sustainable value chains into national and EU policies in order to create more favourable regulations.
- European woodworking industries regret that the current EU renewable energy policy does not properly acknowledge the industry's interest in rationally utilizing the value-added potential of wood raw material before bio-energy use, which is on the rise.
- Furniture trade continues to be the most dynamic sector in the international trade of VAWPs, dwarfing builders' joinery and carpentry (BJC), as well as profiled wood trade.
- China's imposing manufacturing and exporting powers have pushed many United States furniture companies out of business, or into outsourcing production while maintaining marketing, and this phenomenon will eventually occur in Europe as well.
- Concerned by the loss of 70% in earnings and 34,000 jobs, on behalf of some domestic manufacturers and unions the US Department of Commerce imposed preliminary anti-dumping duties on wooden bedroom furniture imported from China.
- Most of the growth opportunities for trade in engineered wood products (EWPs) in the short term are in exports of glulam to Japan for factory-built housing components.
- Market growth of EWPs, which is tied to residential construction markets in North America, stabilizes as market share reaches the limit of substitution for conventional wood products.
- New applications for EWPs need to be developed if historical growth rates are to continue.
- In the BJC segment, the Conformité Européen (CE) Marking will be extended to several new building products in 2005-2006, following the entry into force of the CE marking on plywood in 2004, resulting in a temporary barrier to trade for those companies not carrying the CE label.

[63] By Mr. Jukka Tissari, Mr. Craig Adair and Dr. Al Schuler.

Secretariat introduction

Demand for primary forest products, such as sawnwood and panels, is reflected in the production and trade of value-added products.[64] This analysis of the trade flows of secondary-processed wood products completes our comprehensive market analysis. The present chapter is divided into two sections: (1) value-added products of furniture and joinery, and (2) engineered wood products. The international trade of value-added forest products is an indication of national capabilities to produce for the export market. A significant domestic market also exists in many countries. Some of the production of primary products is not accounted for in statistics when integrated processing occurs; for example; from log processing directly through furniture component manufacturing.

Mr. Jukka Tissari[65], Director, Division of Forest Industries and Markets, Indufor Oy, has analysed the value-added markets for the third year now. The secretariat thanks him for his continued participation in our work. He begins the chapter with an analysis of the value-added wood products markets and concludes it by looking at the European industry's actions to influence government policies and to build value-added markets.

Once again the North American engineered wood products market was studied by Mr. Craig Adair[66], Director, Market Research, APA–The Engineered Wood Association and Dr. Al Schuler[67], Research Economist, USDA, Forest Service. Dr. Schuler is a member of the UNECE/FAO Team of Specialists on Forest Products Markets and Marketing. Engineered wood products continue to show innovative design and applications; they are part of the solution to the "sound use of wood" policy, as recommended at the UNECE Timber Committee and FAO European Forestry Commission seminar in Romania in 2003 "Invest in research and development to produce innovative, attractive, client-oriented products, at competitive prices".

Statistics in this chapter do not yet come from the Joint Forest Sector questionnaire, as in the preceding statistics-based chapters. Although the questionnaire contains questions on the important value-added forest products trade, the responses have been insufficient to provide a basis for this chapter's analysis. Instead, the author has drawn on UN Comtrade[68] statistics in the first section for the major countries involved in the international trade of further-processed wood products. The most current available Comtrade statistics are for 2002. The 2001 figures were simultaneously updated, resulting in minor differences from the figures reported last year. For engineered wood products, statistics are from the APA–The Engineered Wood Association.

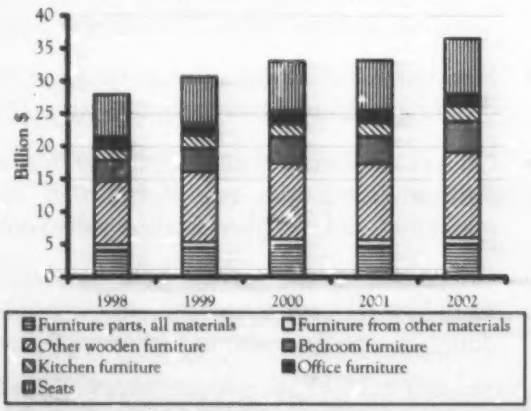
10.1 Imports of value-added wood products in 2001 and 2002

10.1.1 *Wooden furniture*

As predicted in last year's chapter, the slowdown in world trade of VAWPs was only temporary. Trade value ($36.5 billion) resumed fast growth in 2002, with an expansion of $3.3 billion, i.e. a 10% increase from the 2001 level (graph 10.1.1).

GRAPH 10.1.1

World imports of wooden furniture by product group, 1998-2002



Notes: Furniture from other materials includes bamboo, osier and rattan. Seats are of wood, cane, bamboo, osier, etc.

Source: UN COMTRADE, 2004.

[64] "Value-added", "secondary-processed" and "further-processed" are terms used interchangeably throughout the chapter.

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[67] Dr. Al Schuler, Research Economist, Northeast Forest Experiment Station, USDA Forest Service, 241 Mercer Springs Road, Princeton, West Virginia, USA 24740, telephone +1 304 431 2727, fax +1 304 431 2772, e-mail: aschuler@fs.fed.us

[68] UN trade database showing trade by direction for over 100 countries since 1960s for all SITC and HS codes. Based on national customs statistics.

TABLE 10.1.1

Regions of origin of furniture imports for five top importing countries, 2001-2002

(%)

	United States		Germany		France		United Kingdom		Japan	
Exporting regions	2001	2002	2001	2002	2001	2002	2001	2002	2001	2002
Asia	47.3	53.5	7.8	7.8	12.5	12.9	26.2	25.9	78.3	80.7
North America	24.5	21.1	0.4	0.3	0.9	0.7	3.4	2.5	4.3	2.8
Europe	18.9	16.7	90.9	91.0	81.2	80.8	64.5	66.7	17.1	16.2
Latin America	8.9	8.4	0.8	0.8	3.7	3.9	2.7	2.2	0.0	0.0
Others	0.5	0.4	0.1	0.1	1.7	1.7	3.2	2.8	0.3	0.2
Total imports in billion $	10.67	12.58	3.51	3.42	2.13	2.25	2.32	2.81	1.90	1.85
Of which furniture parts, billion $	1.23	1.39	0.63	0.62	0.29	0.30	0.35	0.49	0.29	0.29

Note: 2001 statistics updated in 2004.

Source: UN COMTRADE, 2004.

Furniture trade continued to be the most dynamic sector in the international trade of VAWPs. "Miscellaneous wooden furniture" accounted for 36% of the total furniture trade. It includes living- and dining-room furniture and small occasional items and shop-fitting furniture. Wooden seats made up 22% of all trade, and kept growing at an 11% rate. Wooden bedroom furniture grew at the fastest pace (15% between 2001-2002). The only product category that declined in 2002 imports was wooden office furniture (down 4%), due to a difficult business environment within major importers in Europe, Japan and the US. Little change in the structure of trade between furniture categories has taken place since 1998. However, trade is growing; e.g. furniture parts exceeded $5 billion for the first time in 2002.

In one year, between 2001 and 2002, Asia's share of imports by the top five countries increased from 37.4% to 41.5%. This increase in market share was concentrated in Japan, and particularly in the US (in the United Kingdom, the Asian market share fell slightly, as Europe increased its share) (table 10.1.1). The top five countries imported 62% of all wooden furniture. The US increased its lead, purchasing a massive $12.6 billion worth of wooden furniture (34% of the world total), followed by Germany (9%), the UK (8%), France (6%) and Japan (5%). Other countries accounted for the remaining 38% of global imports.

Asian trade with the US continued to mushroom, making up 53% of all imports in the world's largest furniture market. The US furniture trade and industry have consolidated their survival strategy to using China and some other Asian countries as a regular sourcing base, and trade expansion has continued.

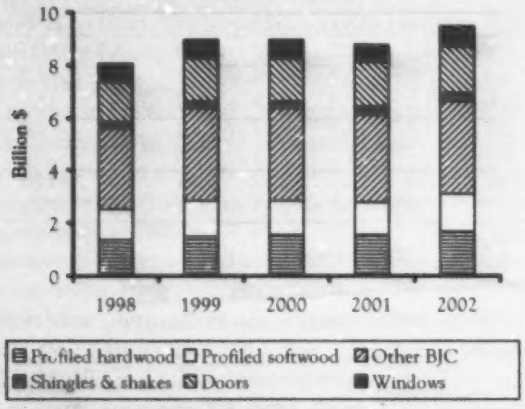
It has been clearly signalled by the Chinese market reports that unprecedented furniture export growth has materialized in 2003 and in the first quarter of 2004 (*China's Forest Products Market Information*, May 2004). US statistics indicate that one segment, wooden bedroom furniture, grew from $359 million in 2000 to $1.2 billion in 2003. The basic reasons are the mushrooming scale of the Chinese industry and the frequently reported improvements in furniture quality. The more flexible US companies have already taken full advantage of contract manufacturing to the extent that 60% of China's wooden furniture is made according to American styles and designs. Some analysts estimate that China produces 40% of all furniture sold in the US.

There are also some short-term trade measures that can be observed behind China's unusually high trade expansion into the US. The primary reason is that the US importers were buying briskly in anticipation of anti-dumping duties against the Chinese imports in the wooden bedroom furniture business, the mainstay of China's surging deliveries to the US. In November 2003, a coalition of US furniture manufacturers and unions resorted to an extreme measure, requesting an anti-dumping investigation. In June 2004 the US Department of Commerce imposed preliminary anti-dumping duties ranging to nearly 200% on some of the $1.2 billion of wooden bedroom furniture imported from China. Seven leading Chinese companies that supply 40% of the bedroom furniture to the US were given tariffs between 4% and 24%. Another 82 companies that responded directly to the US inquiries face a duty of nearly 11%. Brought about on behalf of US furniture manufacturers and unions, this is the largest anti-dumping case by US manufacturers against their Chinese competitors. However, another US coalition, composed of furniture manufacturers and retailers who import from China, have protested the campaign to impose the duties. (As the *Review* went to print in July 2004, there had not yet been an official reaction from China.)

The SARS outbreak in 2003 produced only a short-term slowing of trade with China that quickly passed. China's exports to European markets have remained stable so far, but potential difficulties for trade with the US may provide a stronger impetus for pushing into the European market.

GRAPH 10.1.2

World imports of builders' joinery, carpentry and profiled wood, 1998-2002



Source: UN COMTRADE, 2004.

10.1.2 *Builders' joinery and carpentry and profiled wood*

In builders' joinery and carpentry (BJC), world imports reached a new record at $9.5 billion in 2002, up 8% from the previous year (graph 10.1.2). Trade expanded by $718 million in one year, the highest growth for many years. Wooden windows grew surprisingly fast (15%) and profiled wood (both softwood and hardwood) recorded a 10% increase. The bulk of trade (38%) is generated by "other" types of products, including parquet flooring, shuttering and miscellaneous items. One third of all trade was in profiled wood, and doors accounted for 19%.

Major markets held their shares fairly well in the world trade picture. In BJC, the US was again the largest importer, accounting for 29% of the world total (table 10.1.2). The top-five accounted for 58% of the world imports. The most marked changes in trade flows of BJC took place in US imports, where North American (Canadian) sources lost ground mostly to Latin American suppliers, while Europe and Asia also increased their shares. In the UK, Asian and North American deliveries grew to the detriment of European and Latin American suppliers. Both Asian and European suppliers enjoyed growth in Japan's imports.

The CE Marking[69] that was raised in last year's chapter on panels is bound to evolve into other building products and in the BJC segment in the next few years. It is expected to become operational in 2005 and obligatory in 2006 on the following BJC products sold in EU markets: glulam timber, finger-jointed structural timber, prefabricated trusses, structural laminated veneer lumber (LVL), prefabricated wall, floor and roof elements for timber frame houses, wood flooring and solid wood panelling and cladding (siding). CE Marking is a key tool for harmonization of quality and safety of wood (and other) products and for fulfilling the EU's Construction Product Directive (CPD) (Carrefour International du Bois, 2004). For those products requiring CE Marking, it is a legal obligation for exports to the EU.

In profiled wood, the US absorbed 32% of the world imports, followed by Japan (8%), the UK (6%), Germany (4%) and France with 3% (table 10.1.3). The top five countries accounted for 53% of world imports. In Germany, European deliveries of profiled wood expanded sharply, while Asian imports declined. Presumably, this was due to rising deliveries from eastern Europe.

TABLE 10.1.2

Regions of origin of BJC imports for five top importing countries, 2001-2002

(%)

	United States		*Germany*		*France*		*United Kingdom*		*Japan*	
Exporting regions	2001	2002	2001	2002	2001	2002	2001	2002	2001	2002
Asia	10.0	10.5	8.4	7.9	15.3	14.0	19.9	22.7	30.0	34.2
North America	67.4	63.7	0.3	0.4	1.9	2.1	7.7	8.9	23.2	17.2
Europe	6.6	7.3	90.9	91.6	78.3	79.4	58.1	54.9	39.9	42.6
Latin America	14.5	16.8	0.3	0.1	3.1	2.7	5.3	4.3	0.2	0.2
Others	1.4	1.7	0.0	0.0	1.4	1.7	9.0	9.3	6.7	5.8
Total imports, in billion $	1.70	1.84	0.71	0.71	0.21	0.20	0.43	0.51	0.48	0.48

Note: 2001 statistics updated in 2004.

Source: UN COMTRADE, 2004.

[69] CE Marking is a mandatory mark for approximately 70% of the products sold on the EU market. The letters "CE" are the abbreviation of the French phrase "Conformité Européene" which literally means "European Conformity".

TABLE 10.1.3

Regions of origin of profiled wood imports for five top importing countries, 2001-2002

(%)

	United States		Germany		France		United Kingdom		Japan	
Exporting regions	*2001*	*2002*	*2001*	*2002*	*2001*	*2002*	*2001*	*2002*	*2001*	*2002*
Asia	15.0	15.5	12.7	9.1	6.7	7.7	21.8	21.0	72.5	74.0
North America	25.1	24.5	2.5	1.3	1.4	1.1	14.6	13.0	12.6	10.8
Europe	4.8	6.1	83.8	88.5	82.9	81.9	60.4	62.6	11.6	11.8
Latin America	49.7	48.9	0.4	0.4	3.8	5.0	1.4	1.3	1.4	1.6
Others	5.3	5.0	0.6	0.6	5.1	4.2	1.9	2.1	2.0	1.8
Total imports, billion $	0.85	1.00	0.12	0.13	0.08	0.10	0.14	0.19	0.27	0.25

Note: 2001 statistics updated in 2004.

Source: UN COMTRADE, 2004.

10.2 North American engineered wood products markets

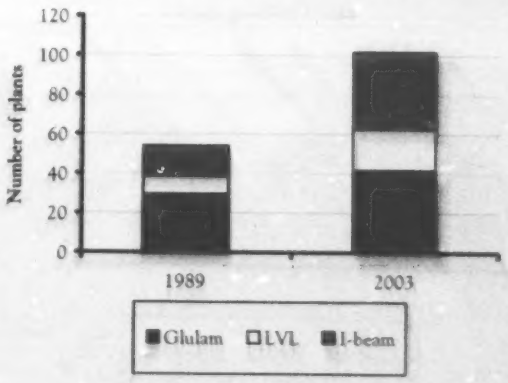
The growth in engineered wood products over the past decade has been phenomenal (graph 10.2.1). Several forces are driving this growth: 1. substitution of I-beams[70] and laminated veneer lumber (LVL) for conventional solid, wide-dimension sawnwood, as well as beams over windows and doors, as builders continue to search for price-competitive structural building materials with better performance properties and more consistent, less volatile prices; 2. the continuing shortage of good quality conventional wide dimension products resulting from environmental pressures and consequent evolving land use policies on federal lands; and 3. during the past five years, the booming housing market, particularly the wood-intensive single-family sector. Of the three products covered in this report, the fastest growing are I-beams and LVL. North American glulam production has been relatively flat, at approximately 831,000 m^3 over the past several years. Market expansion for EWPs depends on developing innovative uses, in some cases substituting for conventional wood products (figure 10.2.1).

10.2.1 I-beams

I-beams, used primarily in North American residential wood flooring systems, now have a 45% share of the single-family housing market (figure 10.2.2). Thanks in part to the strong single-family market, in 2003 North American I-beam production was up almost 10%, reaching 327 million linear metres in 2003. However, growth in 2004 and 2005 is expected to be lower, reflecting a slowdown in the housing market. The US accounts for 90% of consumption and 75% of production, importing approximately 46 million linear metres from Canada in 2003. Offshore exports of I-beams are minimal, with some volume going from North America to Europe and Japan.

GRAPH 10.2.1

North American engineered wood products capacity, 1989 and 2003



Source: APA, 2004.

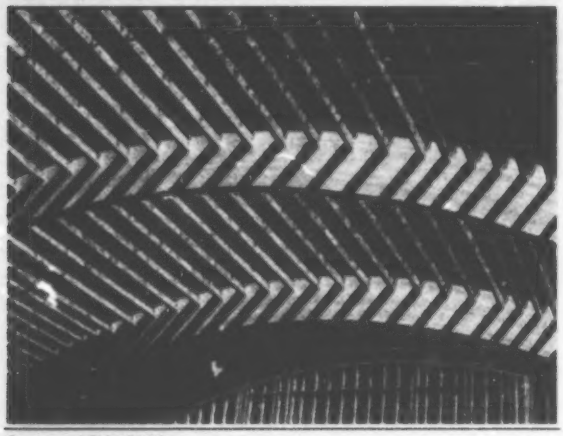
10.2.2 LVL

LVL production continued its growth path in 2003, totalling 1.9 million m^3, up 8.5% from 2002 levels. Much of the recent growth has been in the beam and window and door header markets, which consume about 46% of the LVL. The other large use is for I-beam flanges, although flanges are experiencing increasing competition from solid, machine stress rated sawnwood and other composite materials such as laminated strand lumber (LSL). Exports of LVL, such as I-beams, are minimal, with Europe and Japan being the major export destinations.

[70] Definitions of EWPs may be found in the electronic annex at www.unece.org/trade/timber/docs/fpamr/2004/fpamr2004.htm

FIGURE 10.2.1

Market expansion for EWPs depends on developing innovative uses



Source: APA, 2004.

FIGURE 10.2.2

I-beams hold a 45% share of the North American single-family housing market

Source: APA, 2004.

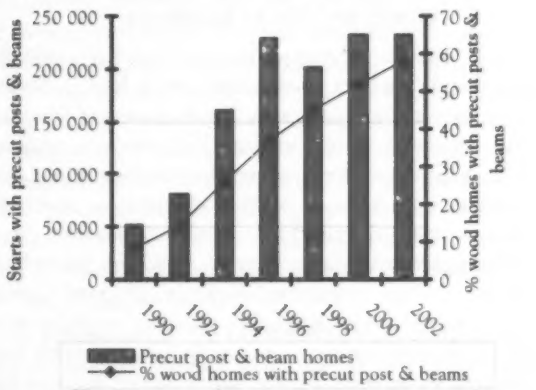
10.2.3 *Japanese EWP markets*

As a result of the devastation caused by the Kobe earthquake in the late 1990s, Japanese government policies increased building construction regulations (e.g. the 10-year home warranty programme and the new quality assurance legislation). Wood-based construction fared well in the earthquake and the Government moved to strengthen building codes and encourage longer-lived buildings.

The result of the new legislation has been a promotion of wood-based construction, and especially of EWPs. Wooden housing in Japan is important, accounting for roughly half of the starts. The bulk of wooden housing construction is the post and beam technique by traditional onsite, highly skilled and intensive-labour construction. Reduced availability of skilled labour is partly a consequence of Japan's ageing population, and partly due to a preference for professions other than manual labour, coupled with severe immigration restrictions. Therefore, due to the reduced availability of skilled labour, post and beam construction is moving to standardized and customized, fully machined and computer-designed, factory-built components (graph 10.2.2). In 2002, 58% of the 401,000 wooden homes built in Japan were constructed with pre-cut posts and beams.

GRAPH 10.2.2

Japanese wooden housing using factory built components, 1990-2002



Source: Japan Pre-cut Machinery Association, 2004.

Automation of pre-cut components in factories has resulted in Japan using more glulam and other engineered wood products. Laminated structural sawnwood consumption is increasing. Japan's consumption of structural glulam is now almost 1.5 million m^3 per annum. In 2002, approximately two thirds (946,000 m^3) of glulam was manufactured in Japan, mainly from sawnwood imported from North America, Europe and Russia. This represented roughly a 20% increase over the previous year.

In 2003, structural glued laminated timber imports were 540,517 m^3, a slight increase over the previous year. The greatest increase in imports was from China, where volumes increased by 2.7 times to 64,000 m^3 over 2002. Austria, Canada and Finland all experienced gains of between 10% and 14%. Exports from the following countries declined (listed in order of export volumes): Sweden, Germany, Russia, the US, Denmark, New Zealand and Norway. Notable over the last year has been the number of European countries that have experienced reductions in exports, perhaps due to decreased competitiveness from the strengthening euro (APA 2004).

Japan produces a large volume of edge-glued panels and imports the rest of its consumption for non-structural applications, such as for shelving, bar tops, furniture, fixtures and stair treads. As its EWP production capacity is limited, Japan is increasingly turning to imports from Europe, North America and Oceania.

10.3 European woodworking industry policies to enhance competitiveness

In light of the market developments presented above, the European Confederation of Woodworking Industries[71] (CEI-Bois) developed Roadmap 2010 to guide the industry into improved competitiveness and enhanced use of wood in the building and construction, home furnishing and transport and packaging end-use sectors. The work was done under the general banner of "making wood and wood-based products the leading material in construction and interior solutions by 2010". The environmental advantages of wood need to be better promoted in order to reach the Roadmap's destination.

After analysing all aspects of these policy-related issues and current market developments and forecasts, the Roadmap 2010 charted these action proposals:

On markets: aggressively increase the per capita consumption of wood products in a profitable and sustainable way. Develop new markets outside Europe;

On wood supply: balance the use of wood raw material between various interests in society;

On barriers to enhanced use: overcome weaknesses of wood at the technical and educational levels;

On the environment: create an environmental agenda for the woodworking industry with the sector's environmental and sustainable forestry advantages as the supporting argument and influence the public and policy makers;

On perceptions: make wood products the material of choice in structural applications, appearance applications, packaging and transport for the public at large;

On industry structure: maintain the relative competitiveness of European production capacity;

On promotion: effectively promote and lobby for the interests of the industry.

10.4 References

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US Department of Commerce, US Bureau of the Census, Report C30; (www.census.gov/const/c30).

[71] www.cei-bois.org

Chapter 11
Markets rise in the East: Tropical timber market trends, 2002-2003[72]

Highlights

- China's increasing imports continued to drive the tropical log and sawnwood markets, with the country also becoming a significant tropical plywood exporter based on imported logs.
- China remained the world's largest tropical sawnwood importer in 2002, despite a slight decline of 1% in imports to under 2.9 million m^3.
- Debate continues on the extent of illegal logging and the role of international trade, and many international agencies and civil society bodies undertook further research on this issue, in cooperation with the tropical timber producing countries.
- Crackdowns on illegal logging reduce the supply of tropical logs, but have little impact on the tropical timber market because of weak demand.
- Prices for Asian and African tropical sawnwood in most cases continued to rise in 2003 and for some species moved to record highs due to restrictions on trade, including logging and export bans.
- Plywood traders in Latin America experienced firm prices and exporters generally benefited from the strong demand from housing construction in the United States during 2003.
- With the appreciation of the euro against the US dollar, prices for African timbers showed significant gains over products traded from South-east Asia, which are traditionally priced in dollars.
- Prices for Malaysian rubberwood logs for domestic consumption in the export-oriented furniture sector increased significantly in 2003.
- India, Malaysia, Thailand and the Philippines are the major ITTO producing-country log importers.
- China continued to export tropical plywood to the EU, particularly to the United Kingdom.

[72] By Dr. Steven E. Johnson, Dr. Michael Adams and Ms. Masaki Miyake.

Secretariat Introduction

Again in 2004, this analysis is possible thanks to continued close cooperation with our colleagues in the International Tropical Timber Organization, Drs. Steven E. Johnson and Michael J. Adams and Ms. Masaki Miyake[73]. Their 2003 *Annual Review and Assessment of the World Timber Situation*[74] and *Market Information Service*[75] are the basis for this chapter. To see a complete analysis of trends in the production, consumption and trade of primary and secondary tropical timber products in relation to global timber trends, please refer to the *Annual Review and Assessment of the World Timber Situation - 2003* on the ITTO website (www.itto.or.jp).

Like our *Forest Products Annual Market Review*, ITTO's *Review* is the basis for their annual market discussion, which has also contributed to the updated analysis here. Drs. Adams and Johnson are members of the UNECE/FAO Team of Specialists on Forest Products Markets and Marketing.

Readers will note that some of the terminology differs slightly from the rest of this *Forest Products Annual Market Review*. Due to incomplete data for several countries, 2002 is the base year for analysis in ITTO's 2003 Review. Only ITTO member countries are covered in this analysis, although together they constitute 95% of all tropical timber trade. ITTO categorizes its members into producer (tropical) and consumer (non-tropical) countries.

11.1 Introduction

In 2003 the global tropical timber sector continued to evolve following the trauma of the late 1990s, with many important markets continuing to move in different directions, reflecting the varied economic situation in consumer markets. China's increasing imports continued to drive the tropical log and sawnwood markets, with the country also becoming a significant tropical plywood exporter based on imported logs. Japan's tropical plywood imports are still relatively stable. Domestic production is decreasing sharply along with tropical log imports. Many producer countries continued their shift to exports of secondary processed products in 2002 and 2003. Trade in these products continued to rise in contrast to the declining level of primary tropical timber products trade (table 11.1.1). This chapter provides details on trends in trade and prices for the major primary tropical timber products; trends in secondary products are covered in the previous chapter.

TABLE 11.1.1.

Production and trade of primary tropical timber products, 2002-2003

(million m³)

	2002	2003	Change %	2002	2003	Change %
	Logs			*Sawnwood*		
Production	136.4	134.1	-1.7	35.2	35.1	-0.1
Imports	15.8	15.9	1.1	10.1	11.3	11.5
Exports	13.2	13.5	2.2	9.1	9.0	-1.7
	Veneer			*Plywood*		
Production	2.7	2.7	2.2	19.3	19.6	1.2
Imports	1.7	1.3	14.6	10.4	9.7	-6.7
Exports	1.4	1.4	0.6	11.3	11.5	2.2

Note: Producer and consumer countries combined.

Source: ITTO, 2004.

11.2 Export trends

ITTO producer countries exported nearly 13.2 million m³ of logs worth $1.8 billion in 2002, with Malaysia providing just over one third of this volume, down from almost three quarters of the ITTO total in the early 1990s (graph 11.2.1). Producer log exports in 2002 decreased 20% from 2001 levels, but rose 2.3% to 13.5 million m³ in 2003, still less than half the level exported just over a decade ago. Sawnwood exports by producer members were up by 2.3% to slightly below 8.6 million m³ (worth $2.6 billion) in 2002, decreasing to nearly 8.5 million m³ in 2003 (graph 11.2.2). Exports from African and Asia-Pacific countries fluctuated in 2002 and 2003, with only Latin American exports following a steady upward trend. Veneer exports from ITTO producer countries increased 8% in 2002 to nearly 1.3 million m³, worth $374 million, but declined by 1.7% in 2003 (graph 11.2.3). Tropical plywood exports by producer members in 2002 declined by 4.6% to nearly 10.3 million m³, worth nearly $3.1 billion, with Indonesia (5.5 million m³) and Malaysia (3.6 million m³) accounting for almost 90% of this total (graph 11.2.4). Exports rose to 10.4 million m³ in 2003, with the increase due mainly to expansion of the Malaysian industry.

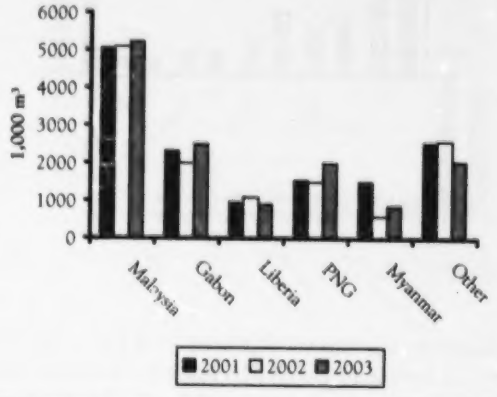
[73] By: Dr. Steven E. Johnson, Dr. Michael Adams, and Ms. Masaki Miyake, Division of Economic Information and Market Intelligence, International Tropical Timber Organization (ITTO), International Organizations Center, 5th Floor, Pacifico-Yokohama, 1-1-1 Minato-Mirai, Nishi-ku, Yokohama 220-0012, Japan, telephone +81 45 223 1110, fax +81 45 223 1111, e-mail: itto@itto.or.jp

[74] www.itto.or.jp/live/Server/400/Annual%20Review%202002.pdf

[75] www.itto.or.jp/live/PageDisplayHandler?pageId=235

GRAPH 11.2.1

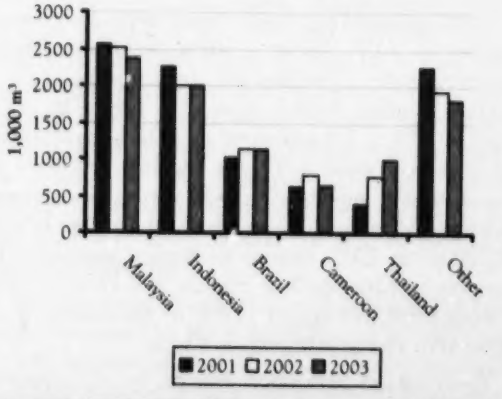
Major tropical log exporters, 2001-2003



Note: PNG=Papua New Guinea.
Source: ITTO, 2004.

GRAPH 11.2.2

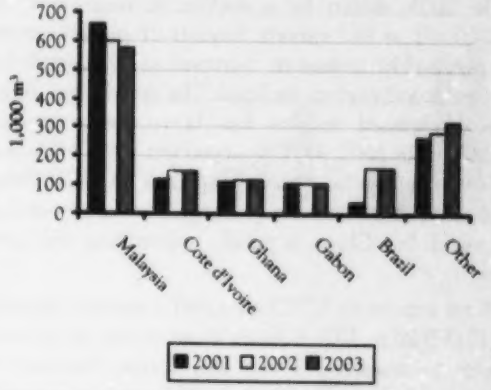
Major tropical sawnwood exporters, 2001-2003



Source: ITTO, 2004.

GRAPH 11.2.3

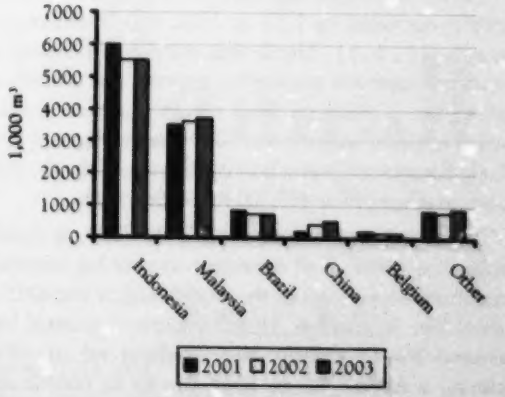
Major tropical veneer exporters, 2001-2003



Source: ITTO, 2004.

GRAPH 11.2.4

Major tropical plywood exporters, 2001-2003



Source: ITTO, 2004.

ITTO consumer countries also exported or re-exported substantial quantities of tropical timber in 2002, led by sawnwood and plywood exports of 561,000 m^3 ($289 million) and 991,000 m^3 ($417 million), respectively. Log and veneer exports were smaller at 141,000 m^3 ($49 million) and 144,000 m^3 ($138 million), respectively, in 2002. Total consumer country exports of tropical sawnwood dropped to 466,000 m^3 in 2003, driven by a decline of nearly 9% (to 394,000 m^3) in EU exports. Exports of tropical veneer and plywood by consumers increased in 2003, while log and sawnwood exports declined. The growth of China's tropical plywood exports has been rapid, reaching 437,000 m^3 in 2002, a 130% surge from 2001 levels, and further increasing by 19% in 2003 to 520,000 m^3. Brazil remains the third largest exporter of tropical plywood in the world, but China is rapidly approaching the same level.

Total exports by ITTO consumer countries increased to 175,000 m^3 in 2003. China's boom in tropical plywood exports to markets like the EU, Taiwan Province of China and Japan is especially notable since it is largely based on logs sourced from ITTO's main African log producers. China-made plywood for export is manufactured mainly from domestic poplar core and an imported okoume surface. Consumer country exports of tropical plywood rose 15% to almost 1.1 million m^3 in 2003, again led by increases from China.

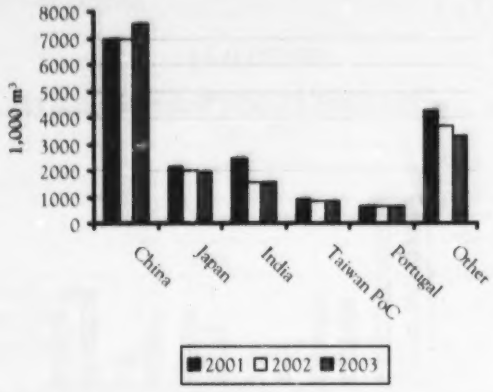
11.3 Import trends

Tropical hardwood log imports by ITTO consumer countries decreased by 3.3% in 2002, to 12.9 million m^3 (graph 11.3.1). The decline was due to decreases in French and Japanese tropical log imports, and a Chinese market that levelled off after several years of steadily growing imports. Major non-ITTO tropical log suppliers include Equatorial Guinea and the Solomon Islands, with exports averaging over 450,000 m^3 per year each.

China's imports remained stable in 2002, at nearly 7 million m^3 (54% of all consumer-country log imports), maintaining its position as the world's largest importer of tropical logs. In contrast, Japan's imports of tropical logs decreased 5% to slightly over 2 million m^3 in 2002, declining a further 4% in 2003 due to its contracting economy, as well as reduced supplies from Malaysia, competition from China for available log supplies, and its increasing reliance on softwood logs for plywood manufacture. India, Malaysia, Thailand and the Philippines are the major ITTO producing-country log importers, accounting for 96% of total producer imports of 2.8 million m^3 in 2002. Of these major producer-country importers, only Thailand increased log imports in both 2002 and 2003.

GRAPH 11.3.1

Major tropical log importers 2001-2003



Source: ITTO, 2004.

European log imports decreased by 4.1% in 2003 to below 2.2 million m^3 after a fall of nearly 1% in 2002; EU countries imported nearly 2.3 million m^3 of tropical logs in 2002, down 0.8% from 2001. Most EU tropical log imports continue to come from African producers. Portugal is the largest of the EU log importers reporting substantial imports of tropical eucalyptus logs from Brazil. French imports of logs fell 12% in 2002 because of log export restrictions in some of its principal supplier countries (including Cameroon, Gabon, Liberia and Republic of Congo). However, French imports recovered slightly in 2003, by 2% to 660,000 m^3.

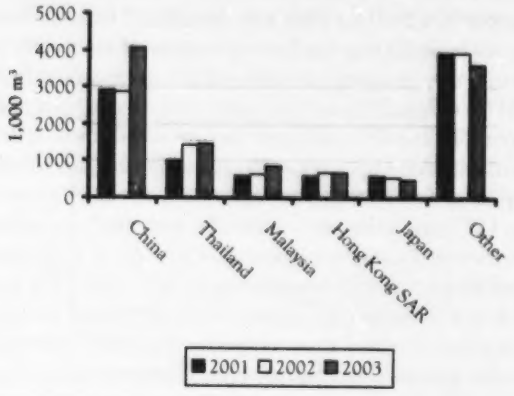
China remained the world's largest tropical sawnwood importer in 2002, despite a slight decline of 1% in imports to under 2.9 million m^3 (graph 11.3.2). Thailand's imports (which more than halved in 1998) surged by 43% to 1.4 million m^3 in 2002, as its economy and secondary wood processing industry continued to recover. Japan's imports of tropical sawnwood decreased 9% to 547,000 m^3 in 2002 and declined a further 10% to 491,000 m^3 in 2003. Imports of tropical sawnwood by consumer countries declined slightly by 0.4% in 2002 to 7.7 million m^3, but surged 11.4% to 8.6 million m^3 in 2003, led by a jump in imports by China.

Total tropical sawnwood imports by EU countries declined by 1.4% in 2002, due primarily to decreased imports in France, Germany and Spain. Brazil, Malaysia and Indonesia are the primary sources for EU imports, accounting for over half of the total. Côte d'Ivoire, Cameroon and Ghana supplied virtually all of the remainder of EU imports. European tropical sawnwood imports decreased another 9% in 2003 to 2.4 million m^3 due to declines in Belgium, Denmark, Germany, Italy, the Netherlands, Portugal and Spain. Spain is the largest

importer of tropical sawnwood in the EU, absorbing 475,000 m³ in 2002 (down 11% from 2001) and 370,000 m³ in 2003. Spain's imports are primarily from Africa (Cameroon and Côte d'Ivoire) and Brazil.

GRAPH 11.3.2

Major tropical sawnwood importers, 2001-2003



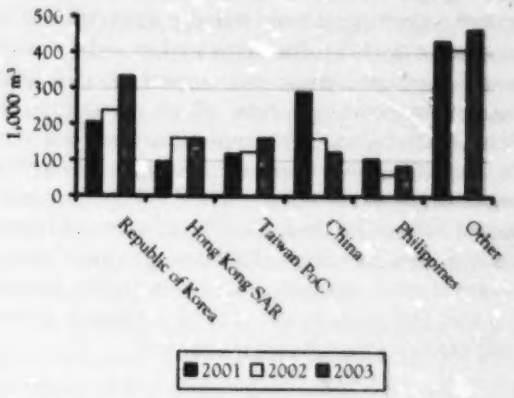
Source: ITTO, 2004.

Total ITTO tropical veneer imports decreased 6.5% to just under 1.2 million m³ in 2002, followed by an increase of 14.6% in 2003 (graph 11.3.3). The Republic of Korea became the largest ITTO tropical veneer importer in 2002, overtaking China, with 240,000 m³. It consolidated this position with a 39% increase to 334,000 m³ in 2003. Meanwhile, China's imports dropped 45% to 161,000 m³ in 2002 and a further 23% to 124,000 m³ in 2003, since it met its veneer needs increasingly via production from imported tropical logs. Formerly a major tropical veneer importer, Japan is now a less significant importer than producer countries such as the Philippines and Malaysia. The EU absorbed 288,000 m³ and 299,000 m³ of tropical veneer in 2002 and 2003, respectively, around one fifth of total ITTO imports in both years.

Tropical plywood imports are still led by Japan, whose imports increased by 2% to 4.6 million m³ in 2002 (graph 11.3.4). Imports continue to replace domestic production of tropical plywood in Japan due to reduced availability of tropical logs and relatively low prices of imported plywood. Tropical plywood imports by ITTO members decreased to just below 9.7 million m³ in 2003. EU imports of tropical plywood totalled 1.3 million m³ in 2002, a 7% decrease from 2001 levels. Most of the EU's tropical plywood also came from Indonesia and Malaysia, with Brazil and inter-European trade also playing a fairly large role in many countries' imports. China continued to export small but increasing amounts of tropical plywood to the EU, particularly to the United Kingdom, where quality and pricing concerns have been raised about China's tropical plywood.

GRAPH 11.3.3

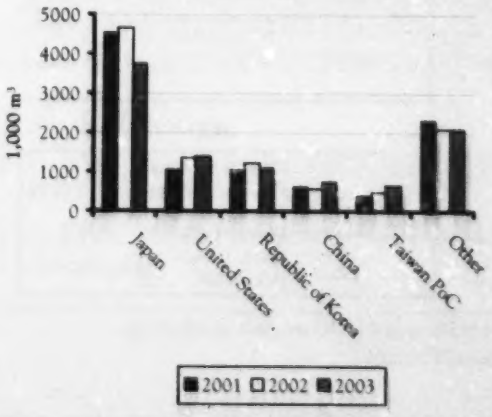
Major tropical veneer importers, 2001-2003



Source: ITTO, 2004.

GRAPH 11.3.4

Major tropical plywood importers, 2001-2003



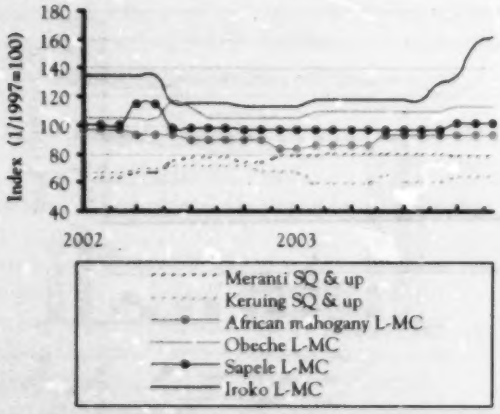
Source: ITTO, 2004.

11.4 Tropical timber prices

Real prices for most primary tropical timber products and species strengthened during 2003, especially in the second half of the year, as availability of raw materials shrank, global economies improved and consumer confidence improved in most markets. African log and sawnwood prices held on to gains made in 2002, with some species reaching highs for the two-year period in 2003 (graph 11.4.1). African timber products are generally priced in euros and with the appreciation of the euro against the US dollar, prices for logs and sawnwood showed significant gains over tropical wood products traded from South-east Asia, which are traditionally priced in US dollars. However, the gains were not solely the result of currency movements: shortages in supply of certain species also drove up prices. Political unrest in the Central African Republic, the Côte d'Ivoire and Liberia, UN trade sanctions against Liberian log exports, bans on exports of ayous and azobe logs, tax increases in several countries and rising freight rates all combined to force many producers to push for higher prices.

GRAPH 11.4.1

Tropical log price trends, 2002-2003



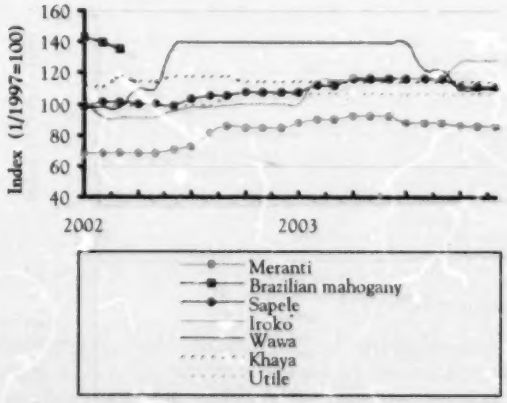
Note: SQ & up and L-MC are grade specifications.
Source: ITTO, 2004.

Despite the limited supply of Asian logs, further aggravated by restrictions on log exports in Indonesia, prices for these products generally remained flat in 2003, held down by subdued consumption in Japan, the principal destination for South-east Asian logs, and by the strong price leadership taken by Chinese buyers who have been bidding down prices at every opportunity. Prices of logs from natural forests in Asia were still around 30% below the levels in early 1997, despite some marginal gains recorded towards the end of the year. In stark contrast to other Asian logs, rubberwood log prices for domestic consumption in the export-oriented furniture sector rose significantly in 2003. With the continuing trend to replace rubber plantations with more profitable oil palm plantations, rubberwood supply had been falling while the demand from furniture manufacturers had been increasing.

Prices for Asian and African tropical sawnwood continued their rising trend in most cases in 2003, and in some instances (e.g. khaya and iroko) rose to record highs (graph 11.4.2). Price gains were largely due to restrictions on trade, including the ban on logging of mahogany in Brazil, the inclusion of this species in appendix II of CITES in late 2003 and the halt in iroko log exports from Côte d'Ivoire. The US continued to absorb most of the available khaya (also known as African mahogany) as the supply of South American mahogany, strongly favoured by US consumers, was markedly restricted. European consumers showed a resurgence of interest in red/brown timbers for furniture manufacture in 2002 and 2003, and this was reflected in higher prices for these timbers. European countries were increasing imports of sawn and further processed tropical products at the expense of logs, and shifted manufacturing facilities to lower cost countries in eastern Europe in order to address increasing production costs. The strength of the euro raised the relative costs of wood processing in the EU.

GRAPH 11.4.2

Tropical sawnwood price trends, 2002-2003

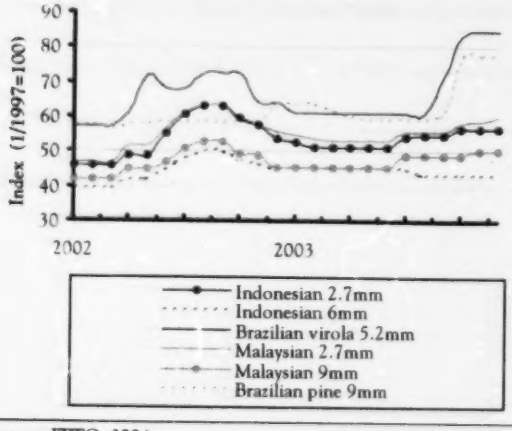


Note: Mahogany prices stopped being reported when Brazil banned harvesting.
Source: ITTO, 2004.

After a slight decline in early 2003, prices for Asian plywood were rising for most of the year (graph 11.4.3). In mid-2003, Japanese authorities revised the Building Standard Law of the Japan Agricultural Standards Code regarding formaldehyde emission control. Malaysia, and particularly Indonesia, were late in addressing the regulation change, resulting in much reduced exports to Japan in the first half of the year. By the end of the year, most Asian manufacturers had complied with the new standards and benefited from a slight increase in prices.

GRAPH 11.4.3

Tropical plywood price trends, 2002-2003



Source: ITTO, 2004.

Prices of Brazilian plywood surged in the second half of 2003 and Brazilian plywood manufacturers began to comply with new EU safety rules on the manufacture of structural plywood ("CE marking") that took effect on 1 April 2004. However, strong demand for pine plywood in Europe and especially in the United States encouraged more Brazilian mills to focus on softwood plywood production, with tropical production dropping in 2002 and 2003.

11.5 The illegal logging issue

Several countries have cracked down on illegal logging, particularly Indonesia, and this has led to severe reductions in log supplies to local mills. However, the reduced supply of tropical logs did not have a significant effect on the global trade or prices of tropical wood products in 2003 because weak demand in the major markets, notably in Japan and the EU, counter-balanced the reduced supply.

The debate on the extent of illegal logging and the role of the international timber trade continued throughout 2003. Many international agencies and civil society bodies undertook further research on this issue, in cooperation with the tropical producing countries. The ITTO began an examination of the discrepancies between data for the export and import of tropical timber. In many cases the reported volume and value of timber exported from a country often differs substantially from those reported by the importing country.

One possible reason for such discrepancies may be unrecorded trade in illegally harvested wood. However, the results of four case studies carried out by ITTO, in China, Indonesia, the United Kingdom and the United States, suggest that many factors are at play. Nevertheless, Indonesian researchers suggested smuggling as the most significant contributor to the very large export-import data discrepancies observed between Indonesia and several importing countries.

When it is completed in 2005, the ITTO study will comprise up to 11 case studies and will be the largest of its kind ever conducted for the international timber trade.

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Annexes

Components of wood products groups **84**
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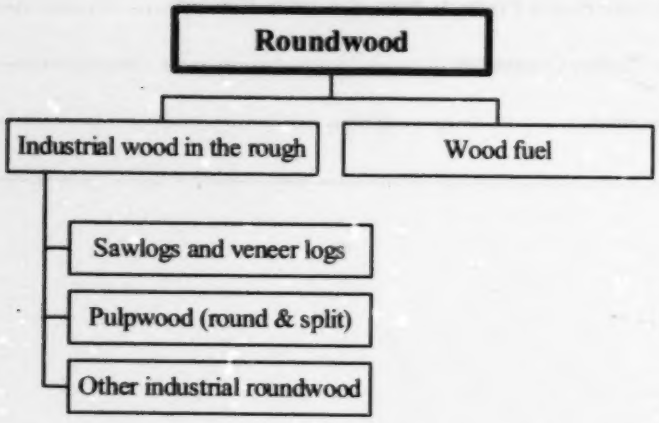
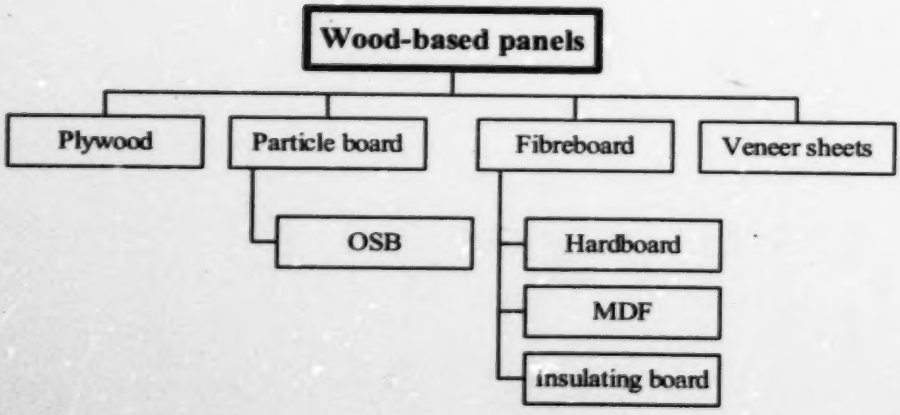
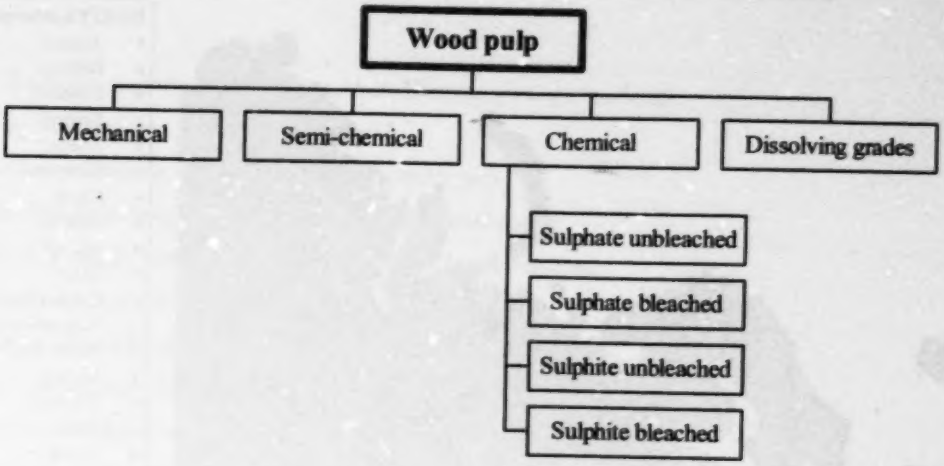
Components of wood products groups

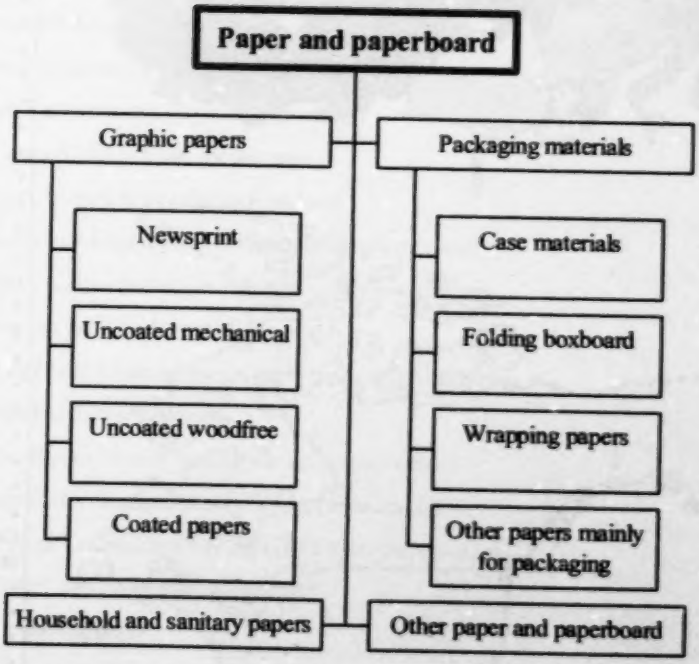
(Based on Joint Forest Sector Questionnaire nomenclature, 2001)

The important breakdowns of the major groups of primary forest products are diagrammed below. In addition, many sub-items are further divided into softwood or hardwood. These are all the roundwood products, sawnwood, veneer sheets and plywood. Items that do not fit into listed aggregates are not shown. These are wood charcoal, chips and particles, wood residues, sawnwood, other pulp and recovered paper.






Wood pulp
Mechanical
Semi-chemical
Chemical
Dissolving grades
Sulphate unbleached
Sulphate bleached
Sulphite unbleached
Sulphite bleached


Paper and paperboard
Graphic papers
Packaging materials
Newsprint
Uncoated mechanical
Uncoated woodfree
Coated papers
Case materials
Folding boxboard
Wrapping papers
Other papers mainly for packaging
Household and sanitary papers
Other paper and paperboard

Countries in the UNECE region and its subregions

"EU/EFTA"-subregion of Europe
"Other Europe"-subregion of Europe
Commonwealth of Independent States (CIS) subregion
North America subregion

EU/EFTA-subregion of Europe
- Austria
- Belgium
- Denmark
- Finland
- France
- Germany
- Greece
- Iceland
- Ireland
- Italy
- Liechtenstein
- Luxembourg
- Netherlands
- Norway
- Portugal
- Spain
- Sweden
- Switzerland
- United Kingdom

Other Europe-subregion of Europe
- Albania
- Andorra
- Bosnia and Herzegovina
- Bulgaria
- Croatia
- Cyprus
- Czech Republic
- Estonia
- Hungary
- Israel
- Latvia
- Lithuania
- Malta
- Monaco
- Romania
- San Marino
- Serbia and Montenegro
- Slovakia
- Slovenia
- The FYR of Macedonia
- Turkey

Commonwealth of Independent States (CIS) subregion
- Armenia
- Azerbaijan
- Belarus
- Georgia
- Kazakhstan
- Kyrgyzstan
- Republic of Moldova
- Russian Federation
- Tajikistan
- Turkmenistan
- Ukraine
- Uzbekistan

North America subregion
- Canada
- United States of America

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Special chapters in former *Forest Products Annual Market Reviews*

Note to readers: We have found that some chapters of the *Review* have a longer life than the *Annual Market Review*. The following is a listing of all the special chapters, including their most important sections, in order to give an idea of their contents. Back issues are available on the Timber Committee website or through the secretariat. In 2003 we stopped including special chapters.

Timber Bulletin – Volume LV (2002)

Chapter 3 "Market effects of wood promotion", 11 pages

- Market and market effects
- How to reach market effects by wood promotion
- Wood promotion of recent years is a success story!
- Successful organizations
- Is wood promotion in danger?
- References

Chapter 4 "Trade links strengthening as Turkey's forest sector is modernized. Turkey's forest products markets", 12 pages

- General economic development
- Forest resources
- Institutional framework
- Roundwood market
- Forest products industries
- Foreign trade of wood products
- Wood furniture
- Paper industry
- Prospects for Turkey's wood markets

Chapter 5 "Chile's forest products markets - a plantation success story", 8 pages

- General economic developments
- Forest resources
- Institutional framework for forest and wood industries
- Wood industry – production and consumption
- Trade of wood and wood products
- Prospects for the future of the Chilean wood industry
- Conclusion
- References

Timber Bulletin – Volume LIV (2001)

Chapter 3 "Romania's Forest Products Markets", 12 pages

- General economic developments
- Forest resources
- Institutional framework – forest policy
- The effects of the transition process
- Forest products industry – production and consumption
- Trade of wood and wood products
- Integration into the EU
- Prospects for wood industry

Chapter 4 "Influence on Japanese demand for wood products", 10 pages

- Background
- Wood use trends
- General trends impacting wood use
- Summary
- References

Timber Bulletin – Volume LIII (2000)

Chapter 3 "Effects of the December 1999 storms on European timber markets", 15 pages

- Damage magnitude: the equivalent of 2 years' harvest in 3 days!
- Market effects: potential enormous imbalances mitigated through sector solidarity
- Comparisons with 1990 market effects: similar problems and solutions
- Assistance by governments: quick and multi-dimensional responsiveness
- Positive outcomes?
- Conclusion

Chapter 4 "Poland's forest products markets", 12 pages

- General economic developments
- Forest resources
- Institutional framework for forest and forest industries
- Effects of the transition process
- Integration into the EU
- Forest industry – production and consumption
- Trade of wood and wood products
- Certified forest products
- Prospects for wood industry

Chapter 5 "China's forest products markets", 19 pages

- General socio-economic development
- Forest resources
- Institutional framework
- Analysis and development of production of China's major forest products, 1981 to 1999
- Development of China's forest product trade from 1981 to 1999
- China's forests product trade in 1999
- Consumption of major forest products, with international comparisons
- Projections of demand and supply of China's forest products to 2010

Chapter 6 "Secondary processed wood products markets", 10 pages

- Secondary processed wood products
- Main flows and trade patterns
- Market profiles
- Conclusion

Chapter 11 "Engineered wood products – production, trade, consumption and outlook", 16 pages

- Current market situation
- Production, consumption and trade statistics
- Outlook for EWPs
- Conclusions

Timber Bulletin – Volume LII (1999)

Chapter 3 "Estonia's Forest Products Market", 7 pages

- General economic development
- Forest resources
- Institutional framework
- Forest industry
- Trade of wood and wood products

Chapter 4 "New Zealand's Forest Products Market", 7 pages

- Background to New Zealand's plantation forestry sector
- Market conditions
- Forestry production and trade 1998/1999

Chapter 5 "Trade Restrictions and the Future", 10 pages

- The question of market access
- Trends in tariffs and non-tariff measures
- Trade impediments
- Implications of further trade liberalization

Chapter 6 "Forest Products in the Electronic Market Place", 6 pages

- WWW-sites for forest products trade
- North American and European electronic commerce
- The role of the ECE Trade Division in electronic commerce

Chapter 13 "Tropical Timber Developments", 16 pages, (has since become annual chapter)

- Production, exports, imports
- Tropical timber consumption and price trends
- Strengthening Asian currencies

Some facts about the Timber Committee

The Timber Committee is a principal subsidiary body of the UNECE (United Nations Economic Commission for Europe) based in Geneva. It constitutes a forum for cooperation and consultation between member countries on forestry, forest industry and forest product matters. All countries of Europe; the former USSR; United States, of America, Canada and Israel are members of the UNECE and participate in its work.

The UNECE Timber Committee shall, within the context of sustainable development, provide member countries with the information and services needed for policy- and decision-making regarding their forest and forest industry sector ("the sector"), including the trade and use of forest products and, when appropriate, formulate recommendations addressed to member Governments and interested organizations. To this end, it shall:

1. With the active participation of member countries, undertake short-, medium- and long-term analyses of developments in, and having an impact on, the sector, including those offering possibilities for the facilitation of international trade and for enhancing the protection of the environment;
2. In support of these analyses, collect, store and disseminate statistics relating to the sector, and carry out activities to improve their quality and comparability;
3. Provide the framework for cooperation e.g. by organizing seminars, workshops and ad hoc meetings and setting up time-limited ad hoc groups, for the exchange of economic, environmental and technical information between governments and other institutions of member countries that is needed for the development and implementation of policies leading to the sustainable development of the sector and to the protection of the environment in their respective countries;
4. Carry out tasks identified by the UNECE or the Timber Committee as being of priority, including the facilitation of subregional cooperation and activities in support of the economies in transition of central and eastern Europe and of the countries of the region that are developing from an economic point of view;
5. It should also keep under review its structure and priorities and cooperate with other international and intergovernmental organizations active in the sector, and in particular with the FAO (Food and Agriculture Organization of the United Nations) and its European Forestry Commission and with the ILO (International Labour Organisation), in order to ensure complementarity and to avoid duplication, thereby optimizing the use of resources.

More information about the Committee's work may be obtained by writing to:

UNECE/FAOTimber Branch
UNECE Trade Development and Timber Division
Palais des Nations
CH - 1211 Geneva 10, Switzerland
Fax: + 41 22 917 0041
E-mail: info.timber@unece.org
Website address: http://www.unece.org/trade/timber

UNECE/FAO publications

Timber Bulletin* Volume LVI (2003) ECE/TIM/BULL/2003/...

1. Forest Products Prices, 2000-2002 (tables available on web, no hard copy available).
2. Forest Products Statistics, 1998-2002.
3. Forest Products Annual Market Analysis, 2002-2004.
4. Forest Fire Statistics, 2000-2002 (web data release expected October 2004, hard copy available December 2004).
5. Forest Products Trade Flow Data, 2000-2001 (tables available on web, no hard copy available).
6. Forest Products Markets: Prospects for 2004.

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Biological Diversity, Tree Species Composition and Environmental Protection in the Regional FRA-2000	ECE/TIM/DP/33
Forestry and Forest Products Country Profile: Ukraine	ECE/TIM/DP/32
The Development of European Forest Resources, 1950 To 2000: a Better Information Base	ECE/TIM/DP/31
Modelling and Projections of Forest Products Demand, Supply and Trade in Europe	ECE/TIM/DP/30
Employment Trends and Prospects in the European Forest Sector	ECE/TIM/DP/29
Forestry Cooperation with Countries in Transition	ECE/TIM/DP/28
Russian Federation Forest Sector Outlook Study	ECE/TIM/DP/27
Forest and Forest Products Country Profile: Georgia	ECE/TIM/DP/26
Forest certification update for the UNECE region, summer 2002	ECE/TIM/DP/25
Forecasts of economic growth in OECD and central and eastern European countries for the period 2000-2040	ECE/TIM/DP/24
Forest Certification update for the UNECE Region, summer 2001	ECE/TIM/DP/23
Structural, Compositional and Functional Aspects of Forest Biodiversity in Europe	ECE/TIM/DP/22
Markets for secondary processed wood products, 1990-2000	ECE/TIM/DP/21
Forest certification update for the UNECE Region, summer 2000	ECE/TIM/DP/20
Trade and environment issues in the forest and forest products sector	ECE/TIM/DP/19
Multiple use forestry	ECE/TIM/DP/18
Forest certification update for the UNECE Region, summer 1999	ECE/TIM/DP/17
A summary of "The competitive climate for wood products and paper packaging: the factors causing substitution with emphasis on environmental promotions"	ECE/TIM/DP/16
Recycling, energy and market interactions	ECE/TIM/DP/15
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The role of women on forest properties in Haute-Savoie (France): Initial research	ECE/TIM/DP/13
Interim report on the Implementation of Resolution H3 of the Helsinki Ministerial Conference on the protection of forests in Europe (Results of the second enquiry)	ECE/TIM/DP/12
Manual on acute forest damage	ECE/TIM/DP/7

International Forest Fire News *(two issues per year)*

Timber and Forest Information Series

Timber Committee Yearbook 2004	ECE/TIM/INF/11

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Downloads are available at http://www.unece.org/trade/timber

Reader Survey

In an effort to continually improve the UNECE/FAO *Timber Bulletin*, "Forest Products Annual Market Review" readers are encouraged to express their opinions on its content, presentation and distribution. In order to better meet readers' needs, we would like to know more about our readership and their uses of the *Review*. Please fax or e-mail your response to the address below. Thank you.

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Job title: _____

What are your market-related activities? _____

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Organisation/Company/Institution/Ministry: _____

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   a. ____ Market sector analyses
   b. ____ Statistical information
   c. ____ Policy development
   d. ____ Information for re-publication
   e. ____ Preparation for Timber Committee market discussions
   f. ____ Other: (please specify)

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   a. ____ Overview of market and policies
   b. ____ Policy implications of market developments
   c. ____ Economic and construction developments
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   e. ____ Sawn softwood
   f. ____ Sawn hardwood
   g. ____ Wood-based panels
   h. ____ Paper, paperboard and woodpulp
   i. ____ Certified forest products
   j. ____ Value added forest products
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The *Forest Products Annual Market Review, 2003-2004* provides a comprehensive analysis of the UNECE region, including the Commonwealth of Independent States, Europe and North America. The *Review* covers forest products from the forest to the final consumer, i.e., from roundwood and primary-processed products to value-added products. Each issue includes extensive statistical information combined with an analysis of trends and developments. Standard statistics-based chapters are presented on sawn softwood, sawn hardwood, wood-based panels, wood raw materials and pulp and paper. Other annual chapters analyse markets for certified forest products, value-added wood products and tropical timber.

This year's *Review* includes a special chapter covering policy issues related to forest products markets. This chapter reviews current policy issues including forest law enforcement and governance, forest certification, climate change, industry competitiveness, wood energy promotion, tariff and non-tariff barriers, phytosanitary regulations, research and development-related policies and the sound use of wood.

The *Forest Products Annual Market Review* and its predecessor publications have been published annually since 1948 by the UNECE/FAO Timber Branch. Its goal is to provide comprehensive statistics and analysis on forest products markets with an emphasis on policy implications. This information is intended for policy makers, researchers, investors and forest products marketing specialists in governments, research institutions, universities and the private business sector. This *Review* is intended for use as a background document for the annual UNECE Timber Committee Market Discussions.

Further information about forest products markets, as well as information about the UNECE Timber Committee and the FAO European Forestry Commission is available on the website www.unece.org/trade/timber. Information about the UNECE may be found at www.unece.org and information about FAO may be found at www.fao.org.

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